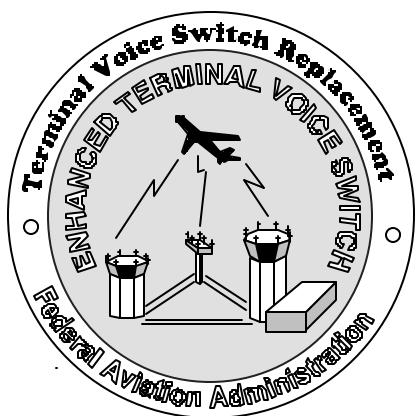

Enhanced Terminal Voice Switch (ETVS)



Demarcation Layouts

Prepared by AND-320

April 12, 2001

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1. Overview

The demarcation layouts contained in this Appendix to the ETVS Technical Data Package describe the cable pinouts for the Denro-supplied cables connecting the various ETVS Basic Systems (BSs) to the Government demarcation point. Pinouts are provided for BS-1 through BS-3 ETVS systems only. BS-4 architecture is slightly different and the pinouts are correspondingly different. The BS-4 pinouts will be supplied in a different document. The BS-1 through BS-3 pinouts contained in this document describe the pinouts for the 66-Block connectors on the end of the Denro ETVS cables. Denro's cables are 25-pair cables with Amp Champ 50 pin D connectors on both ends. The connectors will attach directly to a 66-block for easy hookup. If a site would like to use 110-Blocks for their demarc, they should indicate this to the Denro representative during the Denro ETVS site survey.

Sites have two options for their demarcation layouts- either match Denro's ETVS connectors or don't. If the site chooses not to match Denro's demarc layouts, Denro can be requested to cut the connectors off the Government side of the cables and punch down on a wire-by-wire basis. This request should be made at the time of the formal ETVS site survey. Site-specific cables/connectors will not be supplied by Denro. All cables and connectors will either be standard or punched-down. If a site would like to use 110-Blocks for their demarc, they should indicate this to the Denro representative during the formal ETVS site survey. Sites may dictate in what order the positions, circuits and radios appear on the cables, within the limits described below, by listing these items in the desired order on the ETVS Worksheets. If the site chooses to have Denro punch down demarc cables, installation time will be increased due to the extra effort involved. For this reason, it is recommended that sites try to match Denro's demarc layouts.

There are three common types of demarcation cables between the ETVS and the Government demarcation point. The first of these cables provides two-way connectivity for Ground-to-Ground (G/G) communication. Another set of cables provides two-way connectivity for Air-to-Ground (A/G) communication. The third type of common demarcation cable provides one-way connectivity for legal recorder output. There is an uncommon type of demarcation cable, which provides connectivity between the demarc point for interlocked and interlocking radio circuits and the ETVS (where radio equipment is shared with another facility).

2. G/G Demarcation Cables

The first thing to know about G/G demarcation cables is that they are connected to the ETVS directly on the backplane of the card cage to which they correspond. There is no distribution panel for G/G demarc cables. This means that there is no consolidation between card cages on the demarcation cables as there is with A/G demarc cables and legal recorder interfaces for position and A/G audio. The audio on the interface passes from the backplane of the card cage to a lightning arrestor card and then out of the top or bottom of the ETVS rack to the Government demarcation point. The lightning arrestor card is designed to provide secondary lightning protection only. Primary lightning protection must be provided at the building entry point by the Government or local telephone company.

The second piece of important information is that the ETVS interfaces to G/G circuits of different sizes. Most circuits found in the field are either 2-wire or 4-wire circuits. Some circuits, however, such as those using E&M signaling, use either 6 or 8 wires. There are two general types of G/G interface card cage configurations, and therefore cable demarc layouts, designed to interface to these different sized circuits. The first (and most common) provides five 2-wire circuit interfaces and up to ten 4-wire circuit interfaces, depending on system size. This will be referred to as a **"Version A"** Circuit Interface Layout. The other type of G/G demarc layout, conveniently called a **"Version B"** Circuit Interface Layout, is laid out for 8-wire circuits. This type will only be used if there are 6-wire or 8-wire circuits in the system (E-lead/M-lead), or the site requests that a card cage be set up as a Version B cage. Both Version A and Version B Circuit Interface Layouts are described in greater detail below. The physical hardware, including card cage(s), surge suppressor(s), and demarc cable(s), is identical for Version A and Version B interface configurations. A G/G interface card cage can be converted from a Version A card cage to a Version B card cage by moving the demarc cable to a different connector on the backplane and adding two additional demarc cables and associated lightning surge suppressors (as required).

If required a site can request during the site survey that the ETVS be delivered with a mixture of Version A and Version B card cages. Typically, though, all cages will either be Version A or Version B.

The third important thing to keep in mind is how the card cages are populated. Whether G/G interface card cages are configured as Version A or Version B, the ETVS must provide connectivity to up to the maximum number of circuits defined for each Basic System size as described in Table 2-1, Required G/G Interfaces and Card Cages, below. The ETVS will typically use either 12 or 13 of the 15 available card slots in each card cage, depending on the size of the system. A maxed-out BS-1 should provide 12 G/G interfaces. These interface cards will be located in the first card cage, which is normally configured as a 12-slot card cage. To get the 20 G/G interfaces required for a maxed-out BS-2, add another card cage must be added to the first 12-slot cage and 8 of the slots would be used. A BS-3 must allow for 50 G/G interfaces. The second card cage is typically configured as a 13-slot card cage. So, we already have a 12-slot card cage and a 13-slot card cage, giving us a total of 25 slots. If we add another 12-slot and another 13-slot card cage to a BS-2 system we will have the requisite 50 card slots for a maxed-out BS-3 system. The different card cages for each Basic System size are depicted in Figure 2-1, BS Sizes and G/G Interface Card Cages, below. Please note that the last 13 slot G/G interface card cage for the BS-3 is located in a separate rack from the first three G/G card cages. Also note that there are other items not shown that are contained within the racks as well as within the card cages.

Card Cage Assignment Deviation – A site may request that an entire card cage be populated (i.e., not just slots 1-12 or 1-13). This will typically only prove advantageous for systems using Version A layouts where filling out one or more card cages reduces the total number of demarc cables. Sites can also chose to leave some slots blank and go to the next available card cage. This can be advantageous when a Version B card cage is a 13-slot cage, since each of the cables for a Version B card cage can handle up to 6 circuits. Skipping the 13th slot in the cage will mean one less demarc cable since the third cable interfaces only one circuit (the 13th). These changes to the typical layout must be requested during the formal Denro site survey and can be reflected in the ETVS worksheet package using the appropriate circuit number.

Demarc Order - Sites have some discretion in determining the order in which circuits appear on the demarc cables. Since circuits are assigned to slots in the card cages based on their size (i.e., number of wires) and on the order they appear in the ETVS Automated Worksheet package, sites can rearrange the demarc cables to some extent by changing the order of the circuits (i.e., the circuit number) in the Worksheets.

Basic System Size	Required G/G Interfaces	12-Slot Card Cages	13-Slot Card Cages
BS-1 (4-9 positions)	12	1	N/A
BS-2 (10-16 positions)	20	1	Partial (8 of 13 slots used)
BS-3 (17-40 positions)	50	2	2

Table 2-1, Required G/G Interfaces and Card Cages

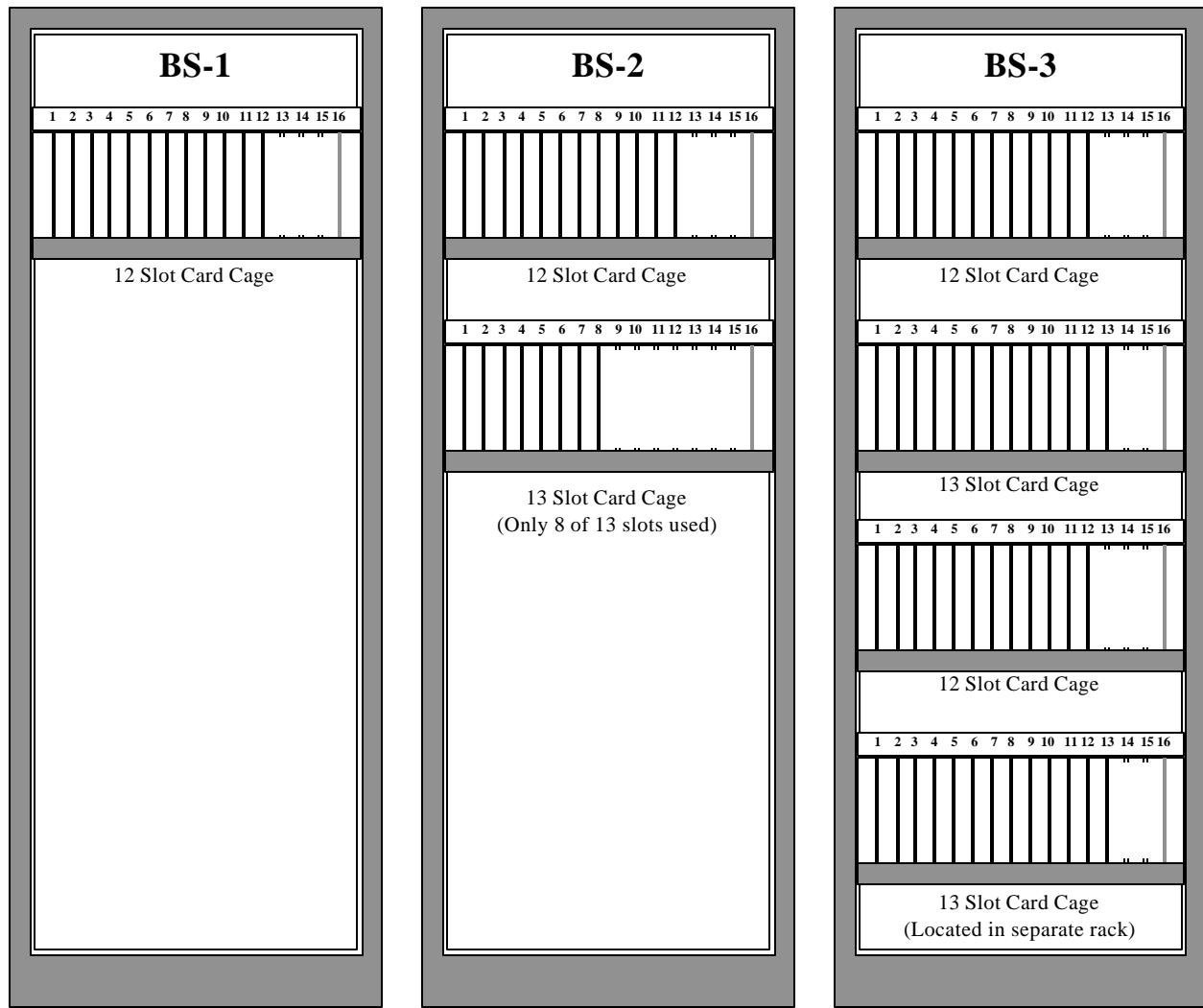


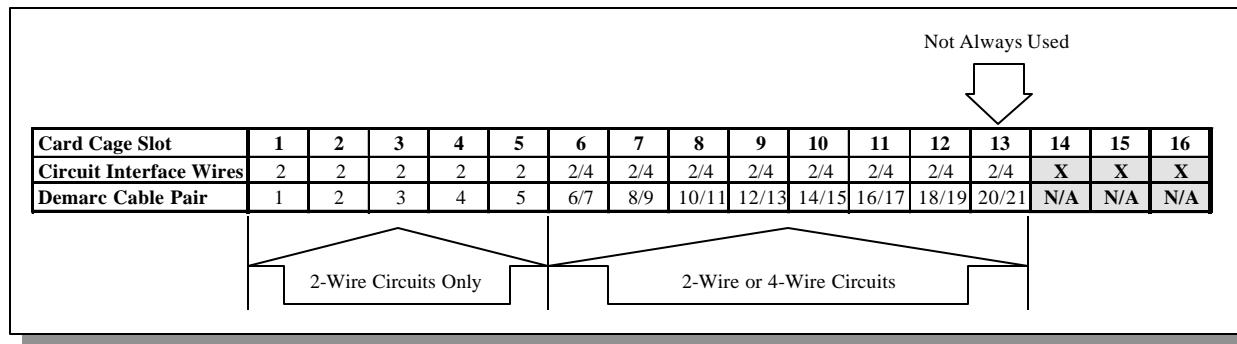
Figure 2-1, BS Sizes and G/G Interface Card Cages

2.1 Version A Circuit Interface Layouts

A Version A card cage configuration includes five slots for 2-wire only circuits and either eight or nine slots for 4-wire circuit interfaces as depicted in Figure 2.1-2, G/G Interface Card Cage, Version A. Version A card cages are not designed for 6-wire or 8-wire circuit interfaces (they go in Version B card cage configurations only). The 2-wire only slots occupy the first five pairs on the demarc cable and correspond to slots 1-5 in the telephone interface card cage. If necessary, 2-wire interface cards can be located in slots wired for 4-wire circuits (slots 6-13), and 2 wires (1 pair) on the demarc cable will not be used. Unfortunately (obviously), 4-wire interface cards cannot be placed in slots wired for 2-wire circuits.

Given the guidelines above, if the site only has three 2-wire interfaces then two of the five dedicated 2-wire slots and the corresponding wire pairs on the demarc cable will be left unused. If a system has one Version A card cage and seven 2-wire interfaces, five will go in the 2-wire slots and the remaining two will be placed in the 4-wire slots. If a system has two Version A card cages and seven 2-wire interfaces, five of the interface cards will go in the 2-wire slots in the first card cage and the remaining two can be placed in the first two slots of the second Version A card cage. There will be three 2-wire slots in the second cage left unused.

Each Version A card cage will have one demarcation cable associated with it. The five dedicated 2-wire slots will occupy the first five pairs on the 25 pair cable. The eight or nine 4-wire slots are each assigned 2 pairs (4 wires) on the demarc cable, and will occupy pairs 6-21. Pairs 22-25 on the Version A card cage demarc cable are left unused.

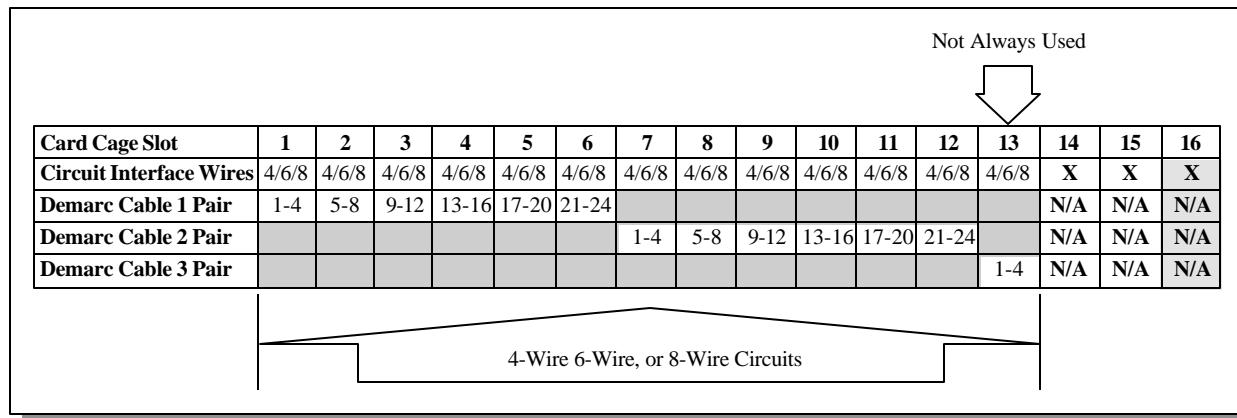
**Figure 2.1-2, G/G Interface Card Cage, Version A**

In summary, a Version A circuit interface card cage has five 2-wire slots and either eight or nine 4-wire slots. 2-wire circuits go in 2-wire circuit slots. 4-wire circuits go in 4-wire circuit slots. A 2-wire circuit can be assigned to a 4-wire slot (and one of the pairs on the demarc cable is not used), but a 4-wire circuit can't be assigned to a 2-wire slot. Circuits are assigned to slots based on their size and the order in which they appear in the ETVS Automated Worksheets. Each Version A card cage will have one (1) demarc cable.

2.2 Version B Circuit Interface Layouts

A Version B card cage layout includes slots for either twelve or thirteen 8-wire circuit interfaces as depicted in Figure 2.2-3, G/G Interface Card Cage, Version B. The demarc cables are laid out for 8-wire circuits, but 2-wire, 4-wire, or 6-wire circuits may also be assigned to any of these slots and the appropriate pairs on the demarc cable will be left unused. Version B card cages will only be included in a system if there are 6-wire or 8-wire circuits in the system, or the site requests Version B card cage layouts at the time of the formal ETVS Site Survey. Circuits are assigned to the first available slot in the order in which they appear in the ETVS Automated Worksheets.

Since each demarc cable is only 25 pair, and each slot is wired for an 8-wire (4 pair) circuit, a fully assigned Version B card cage may have up to three associated demarc cables. The first 6 interfaces are assigned to the first six slots (slots 1-6) and appear on the first Version B demarc cable (6 slots * 4 pair/slot = 24 pairs). The next six interfaces are assigned to slots 7-12 and will appear on the second Version B demarc cable. The 13th interface in this card cage (if it is a 13 slot card cage) will have its own 25 pair cable (so you may want to skip it and go to the next card cage).

**Figure 2.2-3, G/G Interface Card Cage, Version B**

In summary, a Version B circuit interface card cage has twelve or thirteen 8-wire slots. A 2-wire, 4-wire, or 6-wire circuit can be assigned to an 8-wire slot and the corresponding pairs on the demarc cable will not be used. Circuits are assigned to slots based on their size and the order in which they appear in the ETVS Automated Worksheets. A Version B card cage may have up to 3 demarc cables.

3. A/G Demarcation Cables

A/G demarc cables originate from the Radio Distribution Panel on the back of the ETVS racks. Since the interfaces connect through the distribution panel, radio interfaces from separate card cages can be placed on the same cable. This is in contrast to the G/G demarcation cables, which come directly off of the card cages to which they correspond. The radio distribution panel allows for some efficiency when assigning frequencies to demarcation cables within the limitations spelled out below.

Each Radio interface slot is hard wired to provide connectivity for the following electrical signals:

- Main Receive Audio
- Standby Receive Audio
- Main Transmit Audio
- Standby Transmit Audio
- Main PTT
- Standby PTT
- Main/Standby Receive Antenna Switch
- Main/Standby Transmit Antenna Switch
- Main Squelch Break
- Standby Squelch Break

Each of these signals is carried on its own demarcation cable, so each group of radio frequencies can have as many as 10 associated demarc cables. Each signal occupies 1 pair on its respective demarc cable. In other words, main receive audio for each frequency in the system will use 1 pair on a Main Receive Audio demarc cable. The radio signals are grouped at the radio distribution panel according to the scheme described in Table 3-1, A/G Demarcation Cable Groups. The radio distribution allows a cable group to provide demarcation interface for radio frequencies contained in two separate radio card cages. Each radio card cage may contain interface cards for up to 8 frequencies, depending on system size and where the card cage is located in the system.

Basic System Size	Required A/G Interfaces	Number of A/G Card Cages	Demarc Cable Groups
BS-1 (4-9 positions)	12	2	1
BS-2 (10-16 positions)	20	3	2
BS-3 (17-40 positions)	50	7	4

Table 3-1, A/G Demarcation Cable Groups

A BS-1 will only have one demarc cable group. Each cable in this group will use 12 of the 25 pairs available on the cable. A BS-2 can have up to 2 cable groups, depending on how many radio frequencies are supported by the system. The first 12 frequencies listed in the ETVS Automated Worksheets are assigned to the first cable group. Any additional frequencies (up to 8) are assigned to the second cable group. A BS-3 can have up to four cable groups, again depending on the number of frequencies supported by the system. The first 12 frequencies listed in the Automated Worksheets are assigned to the first cable group. The following eight frequencies are assigned to the second cable group. The next 16 frequencies are assigned to the third radio demarc cable group. Any additional frequencies (up to 16) are assigned to the fourth radio demarc cable group.

Squelch Detect Cables – The number of demarc cables in each cable set will vary depending on how the frequency interfaces are configured. For instance, most radios will be configured to use voice detection on the receive pair to indicate the presence of incoming audio. If supported by the actual radio receivers, however, squelch detect can be used to indicate incoming audio from the main and standby receivers as required. Otherwise, these demarc cables will not be provided.

Antennae Switching Cables - If the site does not require antennae switching signals be sent to the radio equipment (one for transmit, one for receive) from the ETVS, the antennae switching cables will not be provided. For instance, many sites have radio configurations where the main and standby transmitters have their own antennae. No need to provide a signal to switch the antennae in this case. If a Main/Standby transmitter (or receiver) pair share an antennae, or RCE equipment is being used for a Main/Standby pair, then the antennae switching signal would be

provided on the antennae switching cable(s). The cable will be provided based on the configuration of the radio interface in the ETVS Automated Worksheet Package. Selecting any option other than "N/A" for the antennae switching option for a radio will trigger the delivery of the appropriate cables.

PTT Cables - If a radio frequency is configured for simplex (a.k.a., center tapped) transmit keying, a PTT cable set (one for Main, one for Standby, as applicable) will not be provided.

Card Cage Assignment Deviation – A BS-3 with 21 frequencies will have three cable groups, even though only 1 pair on each cable contained in the third group is used. In this case, the site may request that frequencies 13-20 be skipped. This leaves 12 frequencies on the first cable group and moves frequencies 13-21 to the third cable group. The second cable group is not used, reducing the number of demarcation blocks the Government must purchase and find room for. Since skipping a cable group may limit the expandability of the system in the future, this option should be discussed with a representative of the ETVS Program Office. These changes to the typical layout must be requested during the formal Denro site survey and can be reflected in the ETVS worksheet package using the appropriate frequency number.

Demarc Order - Sites have some discretion in determining the order in which frequencies appear on the demarc cables. Since frequencies are assigned to slots in the card cages based on the order in which they appear in the ETVS Automated Worksheet package, sites can rearrange the demarc cables by changing the order of the frequencies (i.e., the frequency number) in the Worksheets.

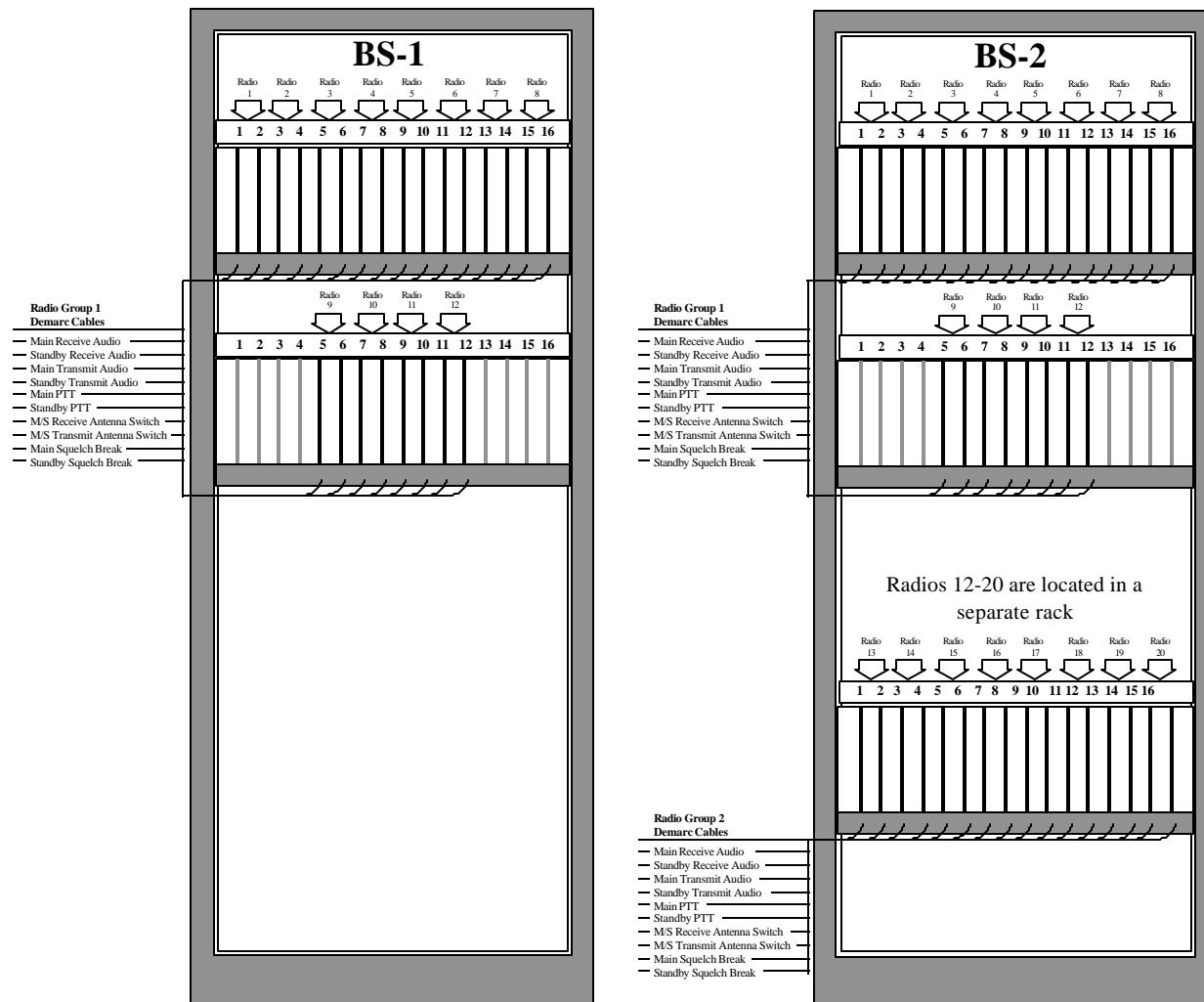


Figure 3-1, BS-1 and BS-2 A/G Card Cage Layouts

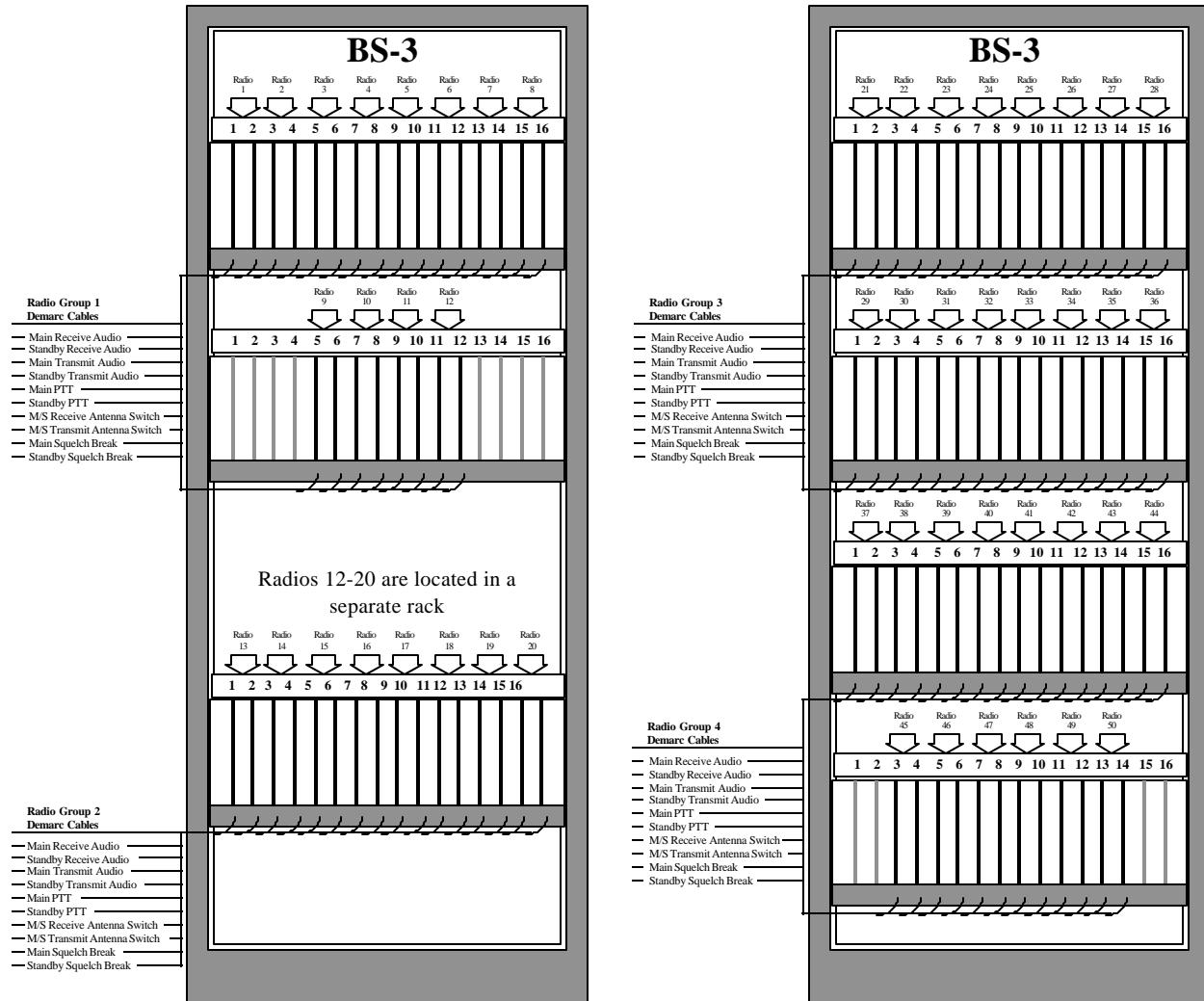


Figure 3-2, BS-3 A/G Card Cage Layout

4. Legal Recorder Demarcation Cables

Each legal recorder demarcation cable will be a 25 pair cable with the standard 50 pin Amp Champ D connector. All legal recorder interfaces are 2-wire and will take one pair on the respective cable. Legal record demarc cables can be provided for all G/G circuits, radio frequencies, and positions supported by the ETVS central rack equipment. If required, there will be one legal record cable for each G/G Interface card cage and radio distribution panel (radio demarc cable group), and one for each position interface panel.

4.1 G/G Interface Legal Record

The legal record audio cables for G/G circuits connect to the back of each G/G interface card cage and will each interface the 12 or 13 circuits contained in the card cage(s). Sites that want to record some, but not all, G/G circuits should try to group the circuit interface cards in the same card cage(s). This may reduce the number of demarc cables required for G/G interface legal record. Denro will bring the G/G legal record audio to the Government demarcation point only if denoted in the ETVS Automated Worksheet Package (Circuit Information Screen) or the site requests it during the formal Denro ETVS Site Survey.

4.2 A/G Interface Legal Record

The legal record audio cables for radio frequencies are grouped similarly to the radio demarc cable groups, with one legal record cable for each cable group (two card cages per group). Each A/G interface legal record cable may provide connectivity to up to 16 frequencies. Refer to section 3, A/G Demarcation Cables, above for more detail on radio demarc cable groups. If a site wishes to record some but not all radio frequencies (e.g., just emergency frequencies), the A/G interface cards should be placed in the same card cage if possible. This may reduce the number of demarc cables required for A/G interface legal record. Denro will bring the A/G legal record audio to the Government demarcation point only if denoted in the ETVS Automated Worksheet Package (Frequency Information Screen) or the site requests it during the formal Denro ETVS Site Survey.

4.3 Position Interface Legal Record

The ETVS uses an operator distribution panel to interface between the central rack equipment (the operator interface card cages) and the operator position equipment. Legal record cables for position audio are connected to the operator distribution panel, rather than each individual operator interface card cage. Since each operator distribution panel interfaces to up to 16 positions, each position interface legal record cable may provide connectivity to up to 16 positions, depending on the layout of the position interface card cages. Since split positions are no longer available on the ETVS contract, there will be not be separate cables for regular and split operator audio. The maintenance position audio is always located on the first pair of the first position interface legal record cable.

A BS-1 will have only one position interface card cage and one corresponding operator distribution panel and, therefore, only one possible position interface legal record cable. Position audio will be contained on the first cable, with the maintenance position on the first pair and positions 1-9 on pairs 2-10 as depicted in Table 4.3-1, BS-1 Operator Recorder Cable Assignments, below.

Card Cage #1 Slot	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Position Number	X	Maint	1	2	3	4	5	6	7	8	9	X	X	X	X	X
Operator Distribution Panel		1	1	1	1	1	1	1	1	1	1					
Record Cable Pair	N/A	1	2	3	4	5	6	7	8	9	10	N/A	N/A	N/A	N/A	N/A

Table 4.3-1, BS-1 Operator Recorder Cable Assignments

A BS-2 will have two operator distribution panels interfacing to two operator interface card cages, as described in Table 4.3-2, BS-2 Operator Recorder Cable Assignments , below. The first distribution panel will be configured exactly like the operator distribution panel found in a BS-1. An additional distribution panel will handle interfaces for positions 10-16. The interface cards for positions 10-16 are housed in their own card cage.

In summary, there are 9 position interface slots in the first card cage (BS-1). These first nine positions interface via the first operator distribution panel. There are an additional 7 position interface slots in the second card cage which interface via the second operator distribution panel. This makes a total of 16 position interface slots, which is the maximum allowed for a BS-2.

Card Cage #1 Slot	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Position Number	X	Maint	1	2	3	4	5	6	7	8	9	X	X	X	X	X
Operator Distribution Panel		1	1	1	1	1	1	1	1	1	1					
Record Cable Pair	N/A	1	2	3	4	5	6	7	8	9	10	N/A	N/A	N/A	N/A	N/A

Card Cage #2 Slot	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Position Number	10	11	12	13	14	15	16						X	X		X
Operator Distribution Panel	2	2	2	2	2	2	2									
Record Cable Pair	1	2	3	4	5	6	7						N/A	N/A		N/A

Table 4.3-2, BS-2 Operator Recorder Cable Assignments

A BS-3 may have up to 40 positions. Since we have a 9-position card cage and distribution panel and a 7-position card cage and distribution panel, we need to add two additional card cages and one additional operator distribution

panel to accommodate the additional 24 positions. The operator distribution panels, card cages, and cable and slot assignments are described in Table 4.3-3, BS-3 Operator Recorder Cable Assignments, below. Rather than add two operator distribution panels to a BS-2 configuration to accommodate the 24 additional positions (since each operator distribution panel can accommodate only 16 positions), Denro has designed the system to take advantage of unused space on the second operator distribution panel. The second operator distribution panel in a BS-2 interfaces the 7 positions that make a BS-2 unique from a BS-1. A BS-3 configuration adds 4 position interface cards (positions 17-20) to the BS-2 card cage, giving it a total of 11 position interface cards. The third card cage will contain interface cards for positions 21-30. The second operator distribution panel will contain the 7 BS-2 positions, the 4 position interface cards added to the BS-2 card cage, plus the first 4 position interface cards of the third card cage. The third operator distribution panel will handle the remaining positions in the third card cage (positions 25-30) and all of the positions in the fourth card cage (positions 31-40). Crystal?

Card Cage #1 Slot	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Position Number	X	Maint	1	2	3	4	5	6	7	8	9	X	X	X	X	X
Operator Distribution Panel	1	1	1	1	1	1	1	1	1	1						
Record Cable Pair	N/A	1	2	3	4	5	6	7	8	9	10	N/A	N/A	N/A	N/A	N/A

Card Cage #2 Slot	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Position Number	10	11	12	13	14	15	16	17	18	19	20		X	X		X
Operator Distribution Panel	2	2	2	2	2	2	2	2	2	2						
Record Cable Pair	1	2	3	4	5	6	7	8	9	10	11		N/A	N/A		N/A

Card Cage #3 Slot	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Position Number	21	22	23	24	25	26	27	28	29	30						
Operator Distribution Panel	2	2	2	2	3	3	3	3	3							
Record Cable Pair	12	13	14	15	1	2	3	4	5	6						

Card Cage #4 Slot	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Position Number					31	32	33	34	35	36	37	38	39	40	X	X
Operator Distribution Panel					3	3	3	3	3	3	3	3	3	3		
Record Cable Pair					7	8	9	10	11	12	13	14	15	16	N/A	N/A

Table 4.3-3, BS-3 Operator Recorder Cable Assignments

5. Remote Interlocking and Interlocked Radio Demarcation Cables

The ETVS provides the capability to interface with radio transmitters and receivers which are shared with another facility's voice switching equipment. When the local site controls and maintains the radio transmit/receive equipment, the ETVS will be configured as the "interlocking" site. When the remote site controls and maintains the radio equipment, the ETVS will be configured as the "interlocked" site. In other words, if the local site owns the radios, they are providing the interlocking function and the remote site is being interlocked with the ETVS.

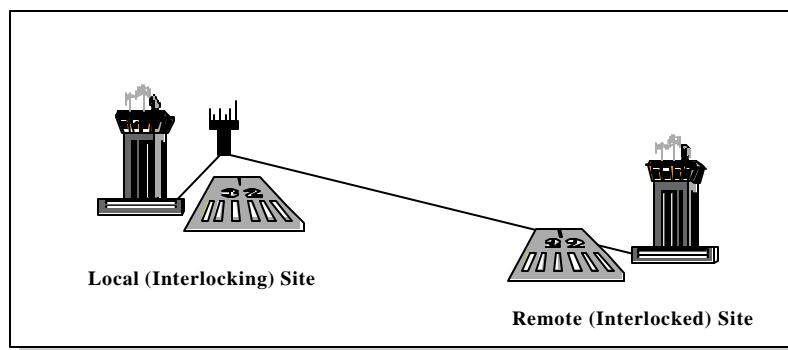


Figure 5-1, Remote Interlocked and Interlocking Radios

5.1 Remote Interlocking Preemption

When an ETVS site is the interlocking site (they own the radios), the option is provided to allow preemption on the interlocked frequency to the remote site. Remote interlocking preemption is normally only used at sites where the tower and TRACON are separate facilities with their own voice switches and the TRACON is acting as a final monitor for multiple parallel approaches. Remote preemption is not intended for use when one of the two facilities shuts down at night because operators at the remote facility would not have access to Main/Standy switching as described below.

Remote Radios are interfaced on a special Remote Radio Interface circuit card that is classmarked to look like a position. Because the remote radio interface looks like a position, preemption is provided to any remote controller accessing the frequency on a frequency, rather than a remote-position-by-remote-position basis. Preemption cannot be granted to individual positions at the remote end; it's an all or nothing deal. Remote preemption makes any controller at the remote site look to local positions as if it were a local position granted preemption on the frequency. In other words, if a local position with preemption accesses the radio, they preempt any local positions, or remote sites without preemption, using the frequency at the time. If a remote operator accesses the frequency, and their site is granted preemption for the frequency, they will seize control of the radio from any local operator not given preemption on the frequency. The first controller or remote site with preemption on the frequency that accesses the radio will inhibit access to the radio by all other local positions or remote users.

Who Is Currently Using?	Who is Attempting to Access?			
	Local position, no preemption	Local position with preemption	Remote facility, no preemption	Remote facility with preemption
Local position, no preemption	~	Y	~	Y
Local position with preemption	U	~	U	~
Remote facility, no preemption	~	Y	~	Y
Remote facility with preemption	U	~	U	~

Table 5.1-1, Local v. Remote Operator Radio Preemption

Note: A “~” indicates that the first controller to access the frequency has the frequency; a “=>” indicates that the operator to the left in the table takes control of the frequency; a “↑” indicates that the operator above takes control of the frequency.

5.2 Remote Interlock Radio Main/Standy Switching

The capability to accomplish Main/Standy transmitter and receiver switching is not provided by remote interlocked or interlocking interfaces. Main and standby radio selection can only be accomplished by the site that owns the radios. The only control signals provided between the ETVS and remote radios are PTT and frequency-in-use. The frequency-in-use signal can be used by the remote site to lockout access to the remoted frequency for controllers at the remote site. In other words, if an operator at the site that owns the radio is accessing the frequency, a frequency-in-use signal is sent to the remote site, which can be used to tell operators at the remote site that the frequency is in use (i.e., they get a lockout tone).

5.3 Interfacing to the Remote Radio

The ETVS can provide a 6-Wire or 8-Wire E&M (preferably 8-Wire) or 4-Wire SF interface for connecting to remote radios. If the site is interlocking (owns the radios), the site will configure the radio, as normal, with Main Only, Main/Standy Single Card (Department of Defense sites only), or Main/Standy Two Cards. This provides access to the radio to local operators. The remote site is interfaced using a specialized Remote Radio Interface card with E&M or SF interface capability. The Remote Radio interface card is placed in a specially designated empty slot in one of the card cages in the system. If the ETVS site is the interlocked site (doesn't own the radio), only the Remote Radio (E&M or SF) interface is required. The radio interface cards (i.e., Main Only, Main/Standy Two Cards, etc.) will be located at the facility that owns the radio.

The Remote Radio interface card will be provided by Denro and will be located in a designated empty 5U slot in one of the card cages. The card will be classmarked as a remote radio and will look like an additional position to the ETVS. A Pigtail cable, which can accommodate up to four interlocked/interlocking radio interfaces, is connected

directly to the backplane of the card cage for the appropriate slot. The pigtail cable will run to the bottom of the rack, where it is attached to a surge suppressor. The surge suppressor provides secondary lightning protection for the remote radio circuits that run between the facilities. Primary lightning protection must be provided by the Government at the primary building entry point for the circuit(s). The cable then runs to the facility demarc. Circuits are arranged in order and are laid out to look like standard 8-Wire E&M circuits (Version B circuit demarc cable), as described in the table at the end of this document.

5.3.1 E&M Signaling

Either a 6-Wire or 8-Wire line can be used when E&M signaling connects the remote radio site to the ETVS. An 8-Wire circuit is preferred because it eliminates balance problems caused by different telco ground potentials. When a 6-Wire circuit is used, the ETVS will connect Tx audio on the Tx pair, Rx audio on the Rx pair, and will use the Signal Battery (SB) connection for both the E-lead and M-lead. An 8-Wire E&M circuit will use both the SB and Signal Ground (SG) for the E and M-leads.

5.3.2 SF Signaling

A 4-Wire SF circuit can also be used to interface between a remote radio and the ETVS. When using an SF circuit, Tx audio is sent on the Tx pair, Rx audio is connected on the Rx pair, and the PTT signal is transmitted using either 2400 or 2600 Hz in-band signaling. A Tone-On-Active circuit is preferred. If Tone-On-Idle signaling is used, any short to the circuit will seize the radio and make it unusable to the site that owns the radio.

G/G TYPE A CARD CAGE CABLE 1 OF 1

PAIR	Circuit Number	Function	CLIP	PIN	COLOR
1	1	TIP	1	26	WHT-BLU
		RING	2	1	BLU-WHT
2	2	TIP	3	27	WHT-ORN
		RING	4	2	ORN-WHT
3	3	TIP	5	28	WHT-GRN
		RING	6	3	GRN-WHT
4	4	TIP	7	29	WHT-BRN
		RING	8	4	BRN-WHT
5	5	TIP	9	30	WHT-SLA
		RING	10	5	SLA-WHT
6	6	TIP	11	31	RED-BLU
		RING	12	6	BLU-RED
7		TIP 1	13	32	RED-ORN
		RING 1	14	7	ORN-RED
8	7	TIP	15	33	RED-GRN
		RING	16	8	GRN-RED
9		TIP 1	17	34	RED-BRN
		RING 1	18	9	BRN-RED
10	8	TIP	19	35	RED-SLA
		RING	20	10	SLA-RED
11		TIP 1	21	36	BLK-BLU
		RING 1	22	11	BLU-BLK
12	9	TIP	23	37	BLK-ORN
		RING	24	12	ORN-BLK
13		TIP 1	25	38	BLK-GRN
		RING 1	26	13	GRN-BLK
14	10	TIP	27	39	BLK-BRN
		RING	28	14	BRN-BLK
15		TIP 1	29	40	BLK-SLA
		RING 1	30	15	SLA-BLK
16	11	TIP	31	41	YEL-BLU
		RING	32	16	BLU-YEL
17		TIP 1	33	42	YEL-ORN
		RING 1	34	17	ORN-YEL
18	12	TIP	35	43	YEL-GRN
		RING	36	18	GRN-YEL
19		TIP 1	37	44	YEL-BNR
		RING 1	38	19	BRN-YEL
20	13	TIP	39	45	YEL-SLA
		RING	40	20	SLA-YEL
21		TIP 1	41	46	VIO-BLU
		RING 1	42	21	BLU-VIO
22	NOT CONNECTED		43	47	VIO-ORN
			44	22	ORN-VIO
23			45	48	VIO-GRN
			46	23	GRN-VIO
24			47	49	VIO-BRN
			48	24	BRN-VIO
25	NOT CONNECTED		49	50	VIO-SLA
			50	25	SLA-VIO

G/G TYPE B CARD CAGE CABLE 1 OF 3

PAIR	Circuit Number	Function	CLIP	PIN	COLOR
1	1	TIP	1	26	WHT-BLU
		RING	2	1	BLU-WHT
2		TIP 1	3	27	WHT-ORN
		RING 1	4	2	ORN-WHT
3		E	5	28	WHT-GRN
		M	6	3	GRN-WHT
4		SB	7	29	WHT-BRN
		SG	8	4	BRN-WHT
5	2	TIP	9	30	WHT-SLA
		RING	10	5	SLA-WHT
6		TIP 1	11	31	RED-BLU
		RING 1	12	6	BLU-RED
7		E	13	32	RED-ORN
		M	14	7	ORN-RED
8		SB	15	33	RED-GRN
		SG	16	8	GRN-RED
9	3	TIP	17	34	RED-BRN
		RING	18	9	BRN-RED
10		TIP 1	19	35	RED-SLA
		RING 1	20	10	SLA-RED
11		E	21	36	BLK-BLU
		M	22	11	BLU-BLK
12		SB	23	37	BLK-ORN
		SG	24	12	ORN-BLK
13	4	TIP	25	38	BLK-GRN
		RING	26	13	GRN-BLK
14		TIP 1	27	39	BLK-BRN
		RING 1	28	14	BRN-BLK
15		E	29	40	BLK-SLA
		M	30	15	SLA-BLK
16		SB	31	41	YEL-BLU
		SG	32	16	BLU-YEL
17	5	TIP	33	42	YEL-ORN
		RING	34	17	ORN-YEL
18		TIP 1	35	43	YEL-GRN
		RING 1	36	18	GRN-YEL
19		E	37	44	YEL-BNR
		M	38	19	BRN-YEL
20		SB	39	45	YEL-SLA
		SG	40	20	SLA-YEL
21	6	TIP	41	46	VIO-BLU
		RING	42	21	BLU-VIO
22		TIP 1	43	47	VIO-ORN
		RING 1	44	22	ORN-VIO
23		E	45	48	VIO-GRN
		M	46	23	GRN-VIO
24		SB	47	49	VIO-BRN
		SG	48	24	BRN-VIO
25	NOT CONNECTED		49	50	VIO-SLA
			50	25	SLA-VIO

G/G TYPE B CARD CAGE CABLE 2 OF 3

PAIR	Circuit Number	Function	CLIP	PIN	COLOR
1	7	TIP	1	26	WHT-BLU
		RING	2	1	BLU-WHT
2		TIP 1	3	27	WHT-ORN
		RING 1	4	2	ORN-WHT
3		E	5	28	WHT-GRN
		M	6	3	GRN-WHT
4		SB	7	29	WHT-BRN
		SG	8	4	BRN-WHT
5	8	TIP	9	30	WHT-SLA
		RING	10	5	SLA-WHT
6		TIP 1	11	31	RED-BLU
		RING 1	12	6	BLU-RED
7		E	13	32	RED-ORN
		M	14	7	ORN-RED
8		SB	15	33	RED-GRN
		SG	16	8	GRN-RED
9	9	TIP	17	34	RED-BRN
		RING	18	9	BRN-RED
10		TIP 1	19	35	RED-SLA
		RING 1	20	10	SLA-RED
11		E	21	36	BLK-BLU
		M	22	11	BLU-BLK
12		SB	23	37	BLK-ORN
		SG	24	12	ORN-BLK
13	10	TIP	25	38	BLK-GRN
		RING	26	13	GRN-BLK
14		TIP 1	27	39	BLK-BRN
		RING 1	28	14	BRN-BLK
15		E	29	40	BLK-SLA
		M	30	15	SLA-BLK
16		SB	31	41	YEL-BLU
		SG	32	16	BLU-YEL
17	11	TIP	33	42	YEL-ORN
		RING	34	17	ORN-YEL
18		TIP 1	35	43	YEL-GRN
		RING 1	36	18	GRN-YEL
19		E	37	44	YEL-BNR
		M	38	19	BRN-YEL
20		SB	39	45	YEL-SLA
		SG	40	20	SLA-YEL
21	12	TIP	41	46	VIO-BLU
		RING	42	21	BLU-VIO
22		TIP 1	43	47	VIO-ORN
		RING 1	44	22	ORN-VIO
23		E	45	48	VIO-GRN
		M	46	23	GRN-VIO
24		SB	47	49	VIO-BRN
		SG	48	24	BRN-VIO
25	NOT CONNECTED		49	50	VIO-SLA
			50	25	SLA-VIO

G/G TYPE B CARD CAGE CABLE 3 OF 3

PAIR	Circuit Number	Function	CLIP	PIN	COLOR
1	13	TIP	1	26	WHT-BLU
		RING	2	1	BLU-WHT
2		TIP 1	3	27	WHT-ORN
		RING 1	4	2	ORN-WHT
3		E	5	28	WHT-GRN
		M	6	3	GRN-WHT
4		SB	7	29	WHT-BRN
		SG	8	4	BRN-WHT
5	NOT CONNECTED		9	30	WHT-SLA
			10	5	SLA-WHT
6			11	31	RED-BLU
			12	6	BLU-RED
7			13	32	RED-ORN
			14	7	ORN-RED
8			15	33	RED-GRN
			16	8	GRN-RED
9			17	34	RED-BRN
			18	9	BRN-RED
10			19	35	RED-SLA
			20	10	SLA-RED
11			21	36	BLK-BLU
			22	11	BLU-BLK
12			23	37	BLK-ORN
			24	12	ORN-BLK
13			25	38	BLK-GRN
			26	13	GRN-BLK
14			27	39	BLK-BRN
			28	14	BRN-BLK
15			29	40	BLK-SLA
			30	15	SLA-BLK
16			31	41	YEL-BLU
			32	16	BLU-YEL
17			33	42	YEL-ORN
			34	17	ORN-YEL
18			35	43	YEL-GRN
			36	18	GRN-YEL
19			37	44	YEL-BNR
			38	19	BRN-YEL
20			39	45	YEL-SLA
			40	20	SLA-YEL
21			41	46	VIO-BLU
			42	21	BLU-VIO
22			43	47	VIO-ORN
			44	22	ORN-VIO
23			45	48	VIO-GRN
			46	23	GRN-VIO
24			47	49	VIO-BRN
			48	24	BRN-VIO
25			49	50	VIO-SLA
		NOT CONNECTED	50	25	SLA-VIO

G/G TYPE A AND TYPE B RECORDERS

Pair	Circuit Number	FUNCTION	CLIP	PIN	COLOR
1	1	RCRDR 2 1	1	26	WHT-BLU
		RCRDR 1 1	2	1	BLU-WHT
2	2	RCRDR 2 2	3	27	WHT-ORN
		RCRDR 1 2	4	2	ORN-WHT
3	3	RCRDR 2 3	5	28	WHT-GRN
		RCRDR 1 3	6	3	GRN-WHT
4	4	RCRDR 2 4	7	29	WHT-BRN
		RCRDR 1 4	8	4	BRN-WHT
5	5	RCRDR 2 5	9	30	WHT-SLA
		RCRDR 1 5	10	5	SLA-WHT
6	6	RCRDR 2 6	11	31	RED-BLU
		RCRDR 1 6	12	6	BLU-RED
7	7	RCRDR 2 7	13	32	RED-ORN
		RCRDR 1 7	14	7	ORN-RED
8	8	RCRDR 2 8	15	33	RED-GRN
		RCRDR 1 8	16	8	GRN-RED
9	9	RCRDR 2 9	17	34	RED-BRN
		RCRDR 1 9	18	9	BRN-RED
10	10	RCRDR 2 10	19	35	RED-SLA
		RCRDR 1 10	20	10	SLA-RED
11	11	RCRDR 2 11	21	36	BLK-BLU
		RCRDR 1 11	22	11	BLU-BLK
12	12	RCRDR 2 12	23	37	BLK-ORN
		RCRDR 1 12	24	12	ORN-BLK
13	13	RCRDR 2 13	25	38	BLK-GRN
		RCRDR 1 13	26	13	GRN-BLK
14	NOT CONNECTED		27	39	BLK-BRN
			28	14	BRN-BLK
15			29	40	BLK-SLA
			30	15	SLA-BLK
16			31	41	YEL-BLU
			32	16	BLU-YEL
17			33	42	YEL-ORN
			34	17	ORN-YEL
18			35	43	YEL-GRN
			36	18	GRN-YEL
19			37	44	YEL-BNR
			38	19	BRN-YEL
20			39	45	YEL-SLA
			40	20	SLA-YEL
21			41	46	VIO-BLU
			42	21	BLU-VIO
22			43	47	VIO-ORN
			44	22	ORN-VIO
23			45	48	VIO-GRN
			46	23	GRN-VIO
24			47	49	VIO-BRN
			48	24	BRN-VIO
25	NOT CONNECTED		49	50	VIO-SLA
			50	25	SLA-VIO

A/G CABLE GROUP 1 (BS-1, 2, AND 3) MAIN RECEIVE AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
1		RX 2 1	1	26	WHT-BLU
		RX 1 1	2	1	BLU-WHT
2		RX 2 2	3	27	WHT-ORN
		RX 1 2	4	2	ORN-WHT
3		RX 2 3	5	28	WHT-GRN
		RX 1 3	6	3	GRN-WHT
4		RX 2 4	7	29	WHT-BRN
		RX 1 4	8	4	BRN-WHT
5		RX 2 5	9	30	WHT-SLA
		RX 1 5	10	5	SLA-WHT
6		RX 2 6	11	31	RED-BLU
		RX 1 6	12	6	BLU-RED
7		RX 2 7	13	32	RED-ORN
		RX 1 7	14	7	ORN-RED
8		RX 2 8	15	33	RED-GRN
		RX 1 8	16	8	GRN-RED
9		RX 2 9	17	34	RED-BRN
		RX 1 9	18	9	BRN-RED
10		RX 2 10	19	35	RED-SLA
		RX 1 10	20	10	SLA-RED
11		RX 2 11	21	36	BLK-BLU
		RX 1 11	22	11	BLU-BLK
12		RX 2 12	23	37	BLK-ORN
		RX 1 12	24	12	ORN-BLK
NOT CONNECTED		25	38	BLK-GRN	
		26	13	GRN-BLK	
		27	39	BLK-BRN	
		28	14	BRN-BLK	
		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) STANDBY RECEIVE AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
1		RX 2 1	1	26	WHT-BLU
		RX 1 1	2	1	BLU-WHT
2		RX 2 2	3	27	WHT-ORN
		RX 1 2	4	2	ORN-WHT
3		RX 2 3	5	28	WHT-GRN
		RX 1 3	6	3	GRN-WHT
4		RX 2 4	7	29	WHT-BRN
		RX 1 4	8	4	BRN-WHT
5		RX 2 5	9	30	WHT-SLA
		RX 1 5	10	5	SLA-WHT
6		RX 2 6	11	31	RED-BLU
		RX 1 6	12	6	BLU-RED
7		RX 2 7	13	32	RED-ORN
		RX 1 7	14	7	ORN-RED
8		RX 2 8	15	33	RED-GRN
		RX 1 8	16	8	GRN-RED
9		RX 2 9	17	34	RED-BRN
		RX 1 9	18	9	BRN-RED
10		RX 2 10	19	35	RED-SLA
		RX 1 10	20	10	SLA-RED
11		RX 2 11	21	36	BLK-BLU
		RX 1 11	22	11	BLU-BLK
12		RX 2 12	23	37	BLK-ORN
		RX 1 12	24	12	ORN-BLK
NOT CONNECTED		25	38	BLK-GRN	
		26	13	GRN-BLK	
		27	39	BLK-BRN	
		28	14	BRN-BLK	
		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) MAIN TRANSMIT AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
1		TX 2 1	1	26	WHT-BLU
		TX 1 1	2	1	BLU-WHT
2		TX 2 2	3	27	WHT-ORN
		TX 1 2	4	2	ORN-WHT
3		TX 2 3	5	28	WHT-GRN
		TX 1 3	6	3	GRN-WHT
4		TX 2 4	7	29	WHT-BRN
		TX 1 4	8	4	BRN-WHT
5		TX 2 5	9	30	WHT-SLA
		TX 1 5	10	5	SLA-WHT
6		TX 2 6	11	31	RED-BLU
		TX 1 6	12	6	BLU-RED
7		TX 2 7	13	32	RED-ORN
		TX 1 7	14	7	ORN-RED
8		TX 2 8	15	33	RED-GRN
		TX 1 8	16	8	GRN-RED
9		TX 2 9	17	34	RED-BRN
		TX 1 9	18	9	BRN-RED
10		TX 2 10	19	35	RED-SLA
		TX 1 10	20	10	SLA-RED
11		TX 2 11	21	36	BLK-BLU
		TX 1 11	22	11	BLU-BLK
12		TX 2 12	23	37	BLK-ORN
		TX 1 12	24	12	ORN-BLK
NOT CONNECTED		25	38	BLK-GRN	
		26	13	GRN-BLK	
		27	39	BLK-BRN	
		28	14	BRN-BLK	
		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) STANDBY TRANSMIT AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
1		TX 2 1	1	26	WHT-BLU
		TX 1 1	2	1	BLU-WHT
2		TX 2 2	3	27	WHT-ORN
		TX 1 2	4	2	ORN-WHT
3		TX 2 3	5	28	WHT-GRN
		TX 1 3	6	3	GRN-WHT
4		TX 2 4	7	29	WHT-BRN
		TX 1 4	8	4	BRN-WHT
5		TX 2 5	9	30	WHT-SLA
		TX 1 5	10	5	SLA-WHT
6		TX 2 6	11	31	RED-BLU
		TX 1 6	12	6	BLU-RED
7		TX 2 7	13	32	RED-ORN
		TX 1 7	14	7	ORN-RED
8		TX 2 8	15	33	RED-GRN
		TX 1 8	16	8	GRN-RED
9		TX 2 9	17	34	RED-BRN
		TX 1 9	18	9	BRN-RED
10		TX 2 10	19	35	RED-SLA
		TX 1 10	20	10	SLA-RED
11		TX 2 11	21	36	BLK-BLU
		TX 1 11	22	11	BLU-BLK
12		TX 2 12	23	37	BLK-ORN
		TX 1 12	24	12	ORN-BLK
NOT CONNECTED		25	38	BLK-GRN	
		26	13	GRN-BLK	
		27	39	BLK-BRN	
		28	14	BRN-BLK	
		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) MAIN PTT

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
1		PTT 2 1	1	26	WHT-BLU
		PTT 1 1	2	1	BLU-WHT
2		PTT 2 2	3	27	WHT-ORN
		PTT 1 2	4	2	ORN-WHT
3		PTT 2 3	5	28	WHT-GRN
		PTT 1 3	6	3	GRN-WHT
4		PTT 2 4	7	29	WHT-BRN
		PTT 1 4	8	4	BRN-WHT
5		PTT 2 5	9	30	WHT-SLA
		PTT 1 5	10	5	SLA-WHT
6		PTT 2 6	11	31	RED-BLU
		PTT 1 6	12	6	BLU-RED
7		PTT 2 7	13	32	RED-ORN
		PTT 1 7	14	7	ORN-RED
8		PTT 2 8	15	33	RED-GRN
		PTT 1 8	16	8	GRN-RED
9		PTT 2 9	17	34	RED-BRN
		PTT 1 9	18	9	BRN-RED
10		PTT 2 10	19	35	RED-SLA
		PTT 1 10	20	10	SLA-RED
11		PTT 2 11	21	36	BLK-BLU
		PTT 1 11	22	11	BLU-BLK
12		PTT 2 12	23	37	BLK-ORN
		PTT 1 12	24	12	ORN-BLK
NOT CONNECTED		25	38	BLK-GRN	
		26	13	GRN-BLK	
		27	39	BLK-BRN	
		28	14	BRN-BLK	
		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) STANDBY PTT

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
1		PTT 2 1	1	26	WHT-BLU
		PTT 1 1	2	1	BLU-WHT
2		PTT 2 2	3	27	WHT-ORN
		PTT 1 2	4	2	ORN-WHT
3		PTT 2 3	5	28	WHT-GRN
		PTT 1 3	6	3	GRN-WHT
4		PTT 2 4	7	29	WHT-BRN
		PTT 1 4	8	4	BRN-WHT
5		PTT 2 5	9	30	WHT-SLA
		PTT 1 5	10	5	SLA-WHT
6		PTT 2 6	11	31	RED-BLU
		PTT 1 6	12	6	BLU-RED
7		PTT 2 7	13	32	RED-ORN
		PTT 1 7	14	7	ORN-RED
8		PTT 2 8	15	33	RED-GRN
		PTT 1 8	16	8	GRN-RED
9		PTT 2 9	17	34	RED-BRN
		PTT 1 9	18	9	BRN-RED
10		PTT 2 10	19	35	RED-SLA
		PTT 1 10	20	10	SLA-RED
11		PTT 2 11	21	36	BLK-BLU
		PTT 1 11	22	11	BLU-BLK
12		PTT 2 12	23	37	BLK-ORN
		PTT 1 12	24	12	ORN-BLK
NOT CONNECTED		25	38	BLK-GRN	
		26	13	GRN-BLK	
		27	39	BLK-BRN	
		28	14	BRN-BLK	
		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) M/S RCV ANT SWITCH

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
1		RC STAT/ANT 2 1	1	26	WHT-BLU	
		RC STAT/ANT 11	2	1	BLU-WHT	
2		RC STAT/ANT 22	3	27	WHT-ORN	
		RC STAT/ANT 12	4	2	ORN-WHT	
3		RC STAT/ANT 23	5	28	WHT-GRN	
		RC STAT/ANT 13	6	3	GRN-WHT	
4		RC STAT/ANT 2 4	7	29	WHT-BRN	
		RC STAT/ANT 1 4	8	4	BRN-WHT	
5		RC STAT/ANT 2 5	9	30	WHT-SLA	
		RC STAT/ANT 1 5	10	5	SLA-WHT	
6		RC STAT/ANT 2 6	11	31	RED-BLU	
		RC STAT/ANT 1 6	12	6	BLU-RED	
7		RC STAT/ANT 2 7	13	32	RED-ORN	
		RC STAT/ANT 1 7	14	7	ORN-RED	
8		RC STAT/ANT 2 8	15	33	RED-GRN	
		RC STAT/ANT 1 8	16	8	GRN-RED	
9		RC STAT/ANT 2 9	17	34	RED-BRN	
		RC STAT/ANT 1 9	18	9	BRN-RED	
10		RC STAT/ANT 2 10	19	35	RED-SLA	
		RC STAT/ANT 1 10	20	10	SLA-RED	
11		RC STAT/ANT 2 11	21	36	BLK-BLU	
		RC STAT/ANT 1 11	22	11	BLU-BLK	
12		RC STAT/ANT 2 12	23	37	BLK-ORN	
		RC STAT/ANT 1 12	24	12	ORN-BLK	
NOT CONNECTED			25	38	BLK-GRN	
			26	13	GRN-BLK	
			27	39	BLK-BRN	
			28	14	BRN-BLK	
			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) M/S TX ANT SWITCH

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
1		TX STAT/ANT 2 1	1	26	WHT-BLU	
		TX STAT/ANT 1 1	2	1	BLU-WHT	
2		TX STAT/ANT 2 2	3	27	WHT-ORN	
		TX STAT/ANT 1 2	4	2	ORN-WHT	
3		TX STAT/ANT 2 3	5	28	WHT-GRN	
		TX STAT/ANT 1 3	6	3	GRN-WHT	
4		TX STAT/ANT 2 4	7	29	WHT-BRN	
		TX STAT/ANT 1 4	8	4	BRN-WHT	
5		TX STAT/ANT 2 5	9	30	WHT-SLA	
		TX STAT/ANT 1 5	10	5	SLA-WHT	
6		TX STAT/ANT 2 6	11	31	RED-BLU	
		TX STAT/ANT 1 6	12	6	BLU-RED	
7		TX STAT/ANT 2 7	13	32	RED-ORN	
		TX STAT/ANT 1 7	14	7	ORN-RED	
8		TX STAT/ANT 2 8	15	33	RED-GRN	
		TX STAT/ANT 1 8	16	8	GRN-RED	
9		TX STAT/ANT 2 9	17	34	RED-BRN	
		TX STAT/ANT 1 9	18	9	BRN-RED	
10		TX STAT/ANT 2 10	19	35	RED-SLA	
		TX STAT/ANT 1 10	20	10	SLA-RED	
11		TX STAT/ANT 2 11	21	36	BLK-BLU	
		TX STAT/ANT 1 11	22	11	BLU-BLK	
12		TX STAT/ANT 2 12	23	37	BLK-ORN	
		TX STAT/ANT 1 12	24	12	ORN-BLK	
NOT CONNECTED			25	38	BLK-GRN	
			26	13	GRN-BLK	
			27	39	BLK-BRN	
			28	14	BRN-BLK	
			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) SQLUELCH BREAK MAIN

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
1		SQ 1	1	26	WHT-BLU
		SQ RT 1	2	1	BLU-WHT
2		SQ 2	3	27	WHT-ORN
		SQ RT 2	4	2	ORN-WHT
3		SQ 3	5	28	WHT-GRN
		SQ RT 3	6	3	GRN-WHT
4		SQ 4	7	29	WHT-BRN
		SQ RT 4	8	4	BRN-WHT
5		SQ 5	9	30	WHT-SLA
		SQ RT 5	10	5	SLA-WHT
6		SQ 6	11	31	RED-BLU
		SQ RT 6	12	6	BLU-RED
7		SQ 7	13	32	RED-ORN
		SQ RT 7	14	7	ORN-RED
8		SQ 8	15	33	RED-GRN
		SQ RT 8	16	8	GRN-RED
9		SQ 9	17	34	RED-BRN
		SQ RT 9	18	9	BRN-RED
10		SQ 10	19	35	RED-SLA
		SQ RT 10	20	10	SLA-RED
11		SQ 11	21	36	BLK-BLU
		SQ RT 11	22	11	BLU-BLK
12		SQ 12	23	37	BLK-ORN
		SQ RT 12	24	12	ORN-BLK
NOT CONNECTED		25	38	BLK-GRN	
		26	13	GRN-BLK	
		27	39	BLK-BRN	
		28	14	BRN-BLK	
		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) SQLUELCH BREAK STANDBY

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
1		SQ 1	1	26	WHT-BLU
		SQ RT 1	2	1	BLU-WHT
2		SQ 2	3	27	WHT-ORN
		SQ RT 2	4	2	ORN-WHT
3		SQ 3	5	28	WHT-GRN
		SQ RT 3	6	3	GRN-WHT
4		SQ 4	7	29	WHT-BRN
		SQ RT 4	8	4	BRN-WHT
5		SQ 5	9	30	WHT-SLA
		SQ RT 5	10	5	SLA-WHT
6		SQ 6	11	31	RED-BLU
		SQ RT 6	12	6	BLU-RED
7		SQ 7	13	32	RED-ORN
		SQ RT 7	14	7	ORN-RED
8		SQ 8	15	33	RED-GRN
		SQ RT 8	16	8	GRN-RED
9		SQ 9	17	34	RED-BRN
		SQ RT 9	18	9	BRN-RED
10		SQ 10	19	35	RED-SLA
		SQ RT 10	20	10	SLA-RED
11		SQ 11	21	36	BLK-BLU
		SQ RT 11	22	11	BLU-BLK
12		SQ 12	23	37	BLK-ORN
		SQ RT 12	24	12	ORN-BLK
NOT CONNECTED		25	38	BLK-GRN	
		26	13	GRN-BLK	
		27	39	BLK-BRN	
		28	14	BRN-BLK	
		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 2 (BS-2 AND 3) MAIN RECEIVE AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		RX 2 1	1	26	WHT-BLU
		RX 1 1	2	1	BLU-WHT
14		RX 2 2	3	27	WHT-ORN
		RX 1 2	4	2	ORN-WHT
15		RX 2 3	5	28	WHT-GRN
		RX 1 3	6	3	GRN-WHT
16		RX 2 4	7	29	WHT-BRN
		RX 1 4	8	4	BRN-WHT
17		RX 2 5	9	30	WHT-SLA
		RX 1 5	10	5	SLA-WHT
18		RX 2 6	11	31	RED-BLU
		RX 1 6	12	6	BLU-RED
19		RX 2 7	13	32	RED-ORN
		RX 1 7	14	7	ORN-RED
20		RX 2 8	15	33	RED-GRN
		RX 1 8	16	8	GRN-RED
NOT CONNECTED			17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) STANDBY RECEIVE AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		RX 2 1	1	26	WHT-BLU
		RX 1 1	2	1	BLU-WHT
14		RX 2 2	3	27	WHT-ORN
		RX 1 2	4	2	ORN-WHT
15		RX 2 3	5	28	WHT-GRN
		RX 1 3	6	3	GRN-WHT
16		RX 2 4	7	29	WHT-BRN
		RX 1 4	8	4	BRN-WHT
17		RX 2 5	9	30	WHT-SLA
		RX 1 5	10	5	SLA-WHT
18		RX 2 6	11	31	RED-BLU
		RX 1 6	12	6	BLU-RED
19		RX 2 7	13	32	RED-ORN
		RX 1 7	14	7	ORN-RED
20		RX 2 8	15	33	RED-GRN
		RX 1 8	16	8	GRN-RED
NOT CONNECTED			17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) MAIN TRANSMIT AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		TX 2 1	1	26	WHT-BLU
		TX 1 1	2	1	BLU-WHT
14		TX 2 2	3	27	WHT-ORN
		TX 1 2	4	2	ORN-WHT
15		TX 2 3	5	28	WHT-GRN
		TX 1 3	6	3	GRN-WHT
16		TX 2 4	7	29	WHT-BRN
		TX 1 4	8	4	BRN-WHT
17		TX 2 5	9	30	WHT-SLA
		TX 1 5	10	5	SLA-WHT
18		TX 2 6	11	31	RED-BLU
		TX 1 6	12	6	BLU-RED
19		TX 2 7	13	32	RED-ORN
		TX 1 7	14	7	ORN-RED
20		TX 2 8	15	33	RED-GRN
		TX 1 8	16	8	GRN-RED
NOT CONNECTED			17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) STANDBY TRANSMIT AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		TX 2 1	1	26	WHT-BLU
		TX 1 1	2	1	BLU-WHT
14		TX 2 2	3	27	WHT-ORN
		TX 1 2	4	2	ORN-WHT
15		TX 2 3	5	28	WHT-GRN
		TX 1 3	6	3	GRN-WHT
16		TX 2 4	7	29	WHT-BRN
		TX 1 4	8	4	BRN-WHT
17		TX 2 5	9	30	WHT-SLA
		TX 1 5	10	5	SLA-WHT
18		TX 2 6	11	31	RED-BLU
		TX 1 6	12	6	BLU-RED
19		TX 2 7	13	32	RED-ORN
		TX 1 7	14	7	ORN-RED
20		TX 2 8	15	33	RED-GRN
		TX 1 8	16	8	GRN-RED
NOT CONNECTED			17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) MAIN PTT

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		PTT 2 1	1	26	WHT-BLU
		PTT 1 1	2	1	BLU-WHT
14		PTT 2 2	3	27	WHT-ORN
		PTT 1 2	4	2	ORN-WHT
15		PTT 2 3	5	28	WHT-GRN
		PTT 1 3	6	3	GRN-WHT
16		PTT 2 4	7	29	WHT-BRN
		PTT 1 4	8	4	BRN-WHT
17		PTT 2 5	9	30	WHT-SLA
		PTT 1 5	10	5	SLA-WHT
18		PTT 2 6	11	31	RED-BLU
		PTT 1 6	12	6	BLU-RED
19		PTT 2 7	13	32	RED-ORN
		PTT 1 7	14	7	ORN-RED
20		PTT 2 8	15	33	RED-GRN
		PTT 1 8	16	8	GRN-RED
	NOT CONNECTED		17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
	NOT CONNECTED		50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) STANDBY PTT

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		PTT 2 1	1	26	WHT-BLU
		PTT 1 1	2	1	BLU-WHT
14		PTT 2 2	3	27	WHT-ORN
		PTT 1 2	4	2	ORN-WHT
15		PTT 2 3	5	28	WHT-GRN
		PTT 1 3	6	3	GRN-WHT
16		PTT 2 4	7	29	WHT-BRN
		PTT 1 4	8	4	BRN-WHT
17		PTT 2 5	9	30	WHT-SLA
		PTT 1 5	10	5	SLA-WHT
18		PTT 2 6	11	31	RED-BLU
		PTT 1 6	12	6	BLU-RED
19		PTT 2 7	13	32	RED-ORN
		PTT 1 7	14	7	ORN-RED
20		PTT 2 8	15	33	RED-GRN
		PTT 1 8	16	8	GRN-RED
NOT CONNECTED			17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) M/S RCV ANT SWITCH

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		RC STAT/ANT 2 1	1	26	WHT-BLU
		RC STAT/ANT 11	2	1	BLU-WHT
14		RC STAT/ANT 22	3	27	WHT-ORN
		RC STAT/ANT 12	4	2	ORN-WHT
15		RC STAT/ANT 23	5	28	WHT-GRN
		RC STAT/ANT 13	6	3	GRN-WHT
16		RC STAT/ANT 2 4	7	29	WHT-BRN
		RC STAT/ANT 1 4	8	4	BRN-WHT
17		RC STAT/ANT 2 5	9	30	WHT-SLA
		RC STAT/ANT 1 5	10	5	SLA-WHT
18		RC STAT/ANT 2 6	11	31	RED-BLU
		RC STAT/ANT 1 6	12	6	BLU-RED
19		RC STAT/ANT 2 7	13	32	RED-ORN
		RC STAT/ANT 1 7	14	7	ORN-RED
20		RC STAT/ANT 2 8	15	33	RED-GRN
		RC STAT/ANT 1 8	16	8	GRN-RED
NOT CONNECTED			17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) M/S TX ANT SWITCH

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		TX STAT/ANT 2 1	1	26	WHT-BLU
		TX STAT/ANT 1 1	2	1	BLU-WHT
14		TX STAT/ANT 2 2	3	27	WHT-ORN
		TX STAT/ANT 1 2	4	2	ORN-WHT
15		TX STAT/ANT 2 3	5	28	WHT-GRN
		TX STAT/ANT 1 3	6	3	GRN-WHT
16		TX STAT/ANT 2 4	7	29	WHT-BRN
		TX STAT/ANT 1 4	8	4	BRN-WHT
17		TX STAT/ANT 2 5	9	30	WHT-SLA
		TX STAT/ANT 1 5	10	5	SLA-WHT
18		TX STAT/ANT 2 6	11	31	RED-BLU
		TX STAT/ANT 1 6	12	6	BLU-RED
19		TX STAT/ANT 2 7	13	32	RED-ORN
		TX STAT/ANT 1 7	14	7	ORN-RED
20		TX STAT/ANT 2 8	15	33	RED-GRN
		TX STAT/ANT 1 8	16	8	GRN-RED
NOT CONNECTED			17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) SQLUELCH BREAK MAIN

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		SQ 1	1	26	WHT-BLU
		SQ RT 1	2	1	BLU-WHT
14		SQ 2	3	27	WHT-ORN
		SQ RT 2	4	2	ORN-WHT
15		SQ 3	5	28	WHT-GRN
		SQ RT 3	6	3	GRN-WHT
16		SQ 4	7	29	WHT-BRN
		SQ RT 4	8	4	BRN-WHT
17		SQ 5	9	30	WHT-SLA
		SQ RT 5	10	5	SLA-WHT
18		SQ 6	11	31	RED-BLU
		SQ RT 6	12	6	BLU-RED
19		SQ 7	13	32	RED-ORN
		SQ RT 7	14	7	ORN-RED
20		SQ 8	15	33	RED-GRN
		SQ RT 8	16	8	GRN-RED
	NOT CONNECTED		17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
	NOT CONNECTED		50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) SQLUELCH BREAK STANDBY

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
13		SQ 1	1	26	WHT-BLU	
		SQ RT 1	2	1	BLU-WHT	
14		SQ 2	3	27	WHT-ORN	
		SQ RT 2	4	2	ORN-WHT	
15		SQ 3	5	28	WHT-GRN	
		SQ RT 3	6	3	GRN-WHT	
16		SQ 4	7	29	WHT-BRN	
		SQ RT 4	8	4	BRN-WHT	
17		SQ 5	9	30	WHT-SLA	
		SQ RT 5	10	5	SLA-WHT	
18		SQ 6	11	31	RED-BLU	
		SQ RT 6	12	6	BLU-RED	
19		SQ 7	13	32	RED-ORN	
		SQ RT 7	14	7	ORN-RED	
20		SQ 8	15	33	RED-GRN	
		SQ RT 8	16	8	GRN-RED	
NOT CONNECTED			17	34	RED-BRN	
			18	9	BRN-RED	
			19	35	RED-SLA	
			20	10	SLA-RED	
			21	36	BLK-BLU	
			22	11	BLU-BLK	
			23	37	BLK-ORN	
			24	12	ORN-BLK	
			25	38	BLK-GRN	
			26	13	GRN-BLK	
			27	39	BLK-BRN	
			28	14	BRN-BLK	
			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 3 (BS-3) MAIN RECEIVE AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		RX 2 1	1	26	WHT-BLU
		RX 1 1	2	1	BLU-WHT
22		RX 2 2	3	27	WHT-ORN
		RX 1 2	4	2	ORN-WHT
23		RX 2 3	5	28	WHT-GRN
		RX 1 3	6	3	GRN-WHT
24		RX 2 4	7	29	WHT-BRN
		RX 1 4	8	4	BRN-WHT
25		RX 2 5	9	30	WHT-SLA
		RX 1 5	10	5	SLA-WHT
26		RX 2 6	11	31	RED-BLU
		RX 1 6	12	6	BLU-RED
27		RX 2 7	13	32	RED-ORN
		RX 1 7	14	7	ORN-RED
28		RX 2 8	15	33	RED-GRN
		RX 1 8	16	8	GRN-RED
29		RX 2 9	17	34	RED-BRN
		RX 1 9	18	9	BRN-RED
30		RX 2 10	19	35	RED-SLA
		RX 1 10	20	10	SLA-RED
31		RX 2 11	21	36	BLK-BLU
		RX 1 11	22	11	BLU-BLK
32		RX 2 12	23	37	BLK-ORN
		RX 1 12	24	12	ORN-BLK
33		RX 2 13	25	38	BLK-GRN
		RX 1 13	26	13	GRN-BLK
34		RX 2 14	27	39	BLK-BRN
		RX 1 14	28	14	BRN-BLK
35		RX 2 15	29	40	BLK-SLA
		RX 1 15	30	15	SLA-BLK
36		RX 2 16	31	41	YEL-BLU
		RX 1 16	32	16	BLU-YEL
NOT CONNECTED			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 3 (BS-3) STANDBY RECEIVE AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		RX 2 1	1	26	WHT-BLU
		RX 1 1	2	1	BLU-WHT
22		RX 2 2	3	27	WHT-ORN
		RX 1 2	4	2	ORN-WHT
23		RX 2 3	5	28	WHT-GRN
		RX 1 3	6	3	GRN-WHT
24		RX 2 4	7	29	WHT-BRN
		RX 1 4	8	4	BRN-WHT
25		RX 2 5	9	30	WHT-SLA
		RX 1 5	10	5	SLA-WHT
26		RX 2 6	11	31	RED-BLU
		RX 1 6	12	6	BLU-RED
27		RX 2 7	13	32	RED-ORN
		RX 1 7	14	7	ORN-RED
28		RX 2 8	15	33	RED-GRN
		RX 1 8	16	8	GRN-RED
29		RX 2 9	17	34	RED-BRN
		RX 1 9	18	9	BRN-RED
30		RX 2 10	19	35	RED-SLA
		RX 1 10	20	10	SLA-RED
31		RX 2 11	21	36	BLK-BLU
		RX 1 11	22	11	BLU-BLK
32		RX 2 12	23	37	BLK-ORN
		RX 1 12	24	12	ORN-BLK
33		RX 2 13	25	38	BLK-GRN
		RX 1 13	26	13	GRN-BLK
34		RX 2 14	27	39	BLK-BRN
		RX 1 14	28	14	BRN-BLK
35		RX 2 15	29	40	BLK-SLA
		RX 1 15	30	15	SLA-BLK
36		RX 2 16	31	41	YEL-BLU
		RX 1 16	32	16	BLU-YEL
NOT CONNECTED			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 3 (BS-3) MAIN TRANSMIT AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		TX 2 1	1	26	WHT-BLU
		TX 1 1	2	1	BLU-WHT
22		TX 2 2	3	27	WHT-ORN
		TX 1 2	4	2	ORN-WHT
23		TX 2 3	5	28	WHT-GRN
		TX 1 3	6	3	GRN-WHT
24		TX 2 4	7	29	WHT-BRN
		TX 1 4	8	4	BRN-WHT
25		TX 2 5	9	30	WHT-SLA
		TX 1 5	10	5	SLA-WHT
26		TX 2 6	11	31	RED-BLU
		TX 1 6	12	6	BLU-RED
27		TX 2 7	13	32	RED-ORN
		TX 1 7	14	7	ORN-RED
28		TX 2 8	15	33	RED-GRN
		TX 1 8	16	8	GRN-RED
29		TX 2 9	17	34	RED-BRN
		TX 1 9	18	9	BRN-RED
30		TX 2 10	19	35	RED-SLA
		TX 1 10	20	10	SLA-RED
31		TX 2 11	21	36	BLK-BLU
		TX 1 11	22	11	BLU-BLK
32		TX 2 12	23	37	BLK-ORN
		TX 1 12	24	12	ORN-BLK
33		TX 2 13	25	38	BLK-GRN
		TX 1 13	26	13	GRN-BLK
34		TX 2 14	27	39	BLK-BRN
		TX 1 14	28	14	BRN-BLK
35		TX 2 15	29	40	BLK-SLA
		TX 1 15	30	15	SLA-BLK
36		TX 2 16	31	41	YEL-BLU
		TX 1 16	32	16	BLU-YEL
NOT CONNECTED		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 3 (BS-3) STANDBY TRANSMIT AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		TX 2 1	1	26	WHT-BLU
		TX 1 1	2	1	BLU-WHT
22		TX 2 2	3	27	WHT-ORN
		TX 1 2	4	2	ORN-WHT
23		TX 2 3	5	28	WHT-GRN
		TX 1 3	6	3	GRN-WHT
24		TX 2 4	7	29	WHT-BRN
		TX 1 4	8	4	BRN-WHT
25		TX 2 5	9	30	WHT-SLA
		TX 1 5	10	5	SLA-WHT
26		TX 2 6	11	31	RED-BLU
		TX 1 6	12	6	BLU-RED
27		TX 2 7	13	32	RED-ORN
		TX 1 7	14	7	ORN-RED
28		TX 2 8	15	33	RED-GRN
		TX 1 8	16	8	GRN-RED
29		TX 2 9	17	34	RED-BRN
		TX 1 9	18	9	BRN-RED
30		TX 2 10	19	35	RED-SLA
		TX 1 10	20	10	SLA-RED
31		TX 2 11	21	36	BLK-BLU
		TX 1 11	22	11	BLU-BLK
32		TX 2 12	23	37	BLK-ORN
		TX 1 12	24	12	ORN-BLK
33		TX 2 13	25	38	BLK-GRN
		TX 1 13	26	13	GRN-BLK
34		TX 2 14	27	39	BLK-BRN
		TX 1 14	28	14	BRN-BLK
35		TX 2 15	29	40	BLK-SLA
		TX 1 15	30	15	SLA-BLK
36		TX 2 16	31	41	YEL-BLU
		TX 1 16	32	16	BLU-YEL
NOT CONNECTED		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 3 (BS-3) MAIN PTT

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		PTT 2 1	1	26	WHT-BLU
		PTT 1 1	2	1	BLU-WHT
22		PTT 2 2	3	27	WHT-ORN
		PTT 1 2	4	2	ORN-WHT
23		PTT 2 3	5	28	WHT-GRN
		PTT 1 3	6	3	GRN-WHT
24		PTT 2 4	7	29	WHT-BRN
		PTT 1 4	8	4	BRN-WHT
25		PTT 2 5	9	30	WHT-SLA
		PTT 1 5	10	5	SLA-WHT
26		PTT 2 6	11	31	RED-BLU
		PTT 1 6	12	6	BLU-RED
27		PTT 2 7	13	32	RED-ORN
		PTT 1 7	14	7	ORN-RED
28		PTT 2 8	15	33	RED-GRN
		PTT 1 8	16	8	GRN-RED
29		PTT 2 9	17	34	RED-BRN
		PTT 1 9	18	9	BRN-RED
30		PTT 2 10	19	35	RED-SLA
		PTT 1 10	20	10	SLA-RED
31		PTT 2 11	21	36	BLK-BLU
		PTT 1 11	22	11	BLU-BLK
32		PTT 2 12	23	37	BLK-ORN
		PTT 1 12	24	12	ORN-BLK
33		PTT 2 13	25	38	BLK-GRN
		PTT 1 13	26	13	GRN-BLK
34		PTT 2 14	27	39	BLK-BRN
		PTT 1 14	28	14	BRN-BLK
35		PTT 2 15	29	40	BLK-SLA
		PTT 1 15	30	15	SLA-BLK
36		PTT 2 16	31	41	YEL-BLU
		PTT 1 16	32	16	BLU-YEL
NOT CONNECTED		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 3 (BS-3) STANDBY PTT

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		PTT 2 1	1	26	WHT-BLU
		PTT 1 1	2	1	BLU-WHT
22		PTT 2 2	3	27	WHT-ORN
		PTT 1 2	4	2	ORN-WHT
23		PTT 2 3	5	28	WHT-GRN
		PTT 1 3	6	3	GRN-WHT
24		PTT 2 4	7	29	WHT-BRN
		PTT 1 4	8	4	BRN-WHT
25		PTT 2 5	9	30	WHT-SLA
		PTT 1 5	10	5	SLA-WHT
26		PTT 2 6	11	31	RED-BLU
		PTT 1 6	12	6	BLU-RED
27		PTT 2 7	13	32	RED-ORN
		PTT 1 7	14	7	ORN-RED
28		PTT 2 8	15	33	RED-GRN
		PTT 1 8	16	8	GRN-RED
29		PTT 2 9	17	34	RED-BRN
		PTT 1 9	18	9	BRN-RED
30		PTT 2 10	19	35	RED-SLA
		PTT 1 10	20	10	SLA-RED
31		PTT 2 11	21	36	BLK-BLU
		PTT 1 11	22	11	BLU-BLK
32		PTT 2 12	23	37	BLK-ORN
		PTT 1 12	24	12	ORN-BLK
33		PTT 2 13	25	38	BLK-GRN
		PTT 1 13	26	13	GRN-BLK
34		PTT 2 14	27	39	BLK-BRN
		PTT 1 14	28	14	BRN-BLK
35		PTT 2 15	29	40	BLK-SLA
		PTT 1 15	30	15	SLA-BLK
36		PTT 2 16	31	41	YEL-BLU
		PTT 1 16	32	16	BLU-YEL
NOT CONNECTED			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 3 (BS-3) M/S RCV ANT SWITCH

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
21		RC STAT/ANT 2 1	1	26	WHT-BLU	
		RC STAT/ANT 11	2	1	BLU-WHT	
22		RC STAT/ANT 22	3	27	WHT-ORN	
		RC STAT/ANT 12	4	2	ORN-WHT	
23		RC STAT/ANT 23	5	28	WHT-GRN	
		RC STAT/ANT 13	6	3	GRN-WHT	
24		RC STAT/ANT 2 4	7	29	WHT-BRN	
		RC STAT/ANT 1 4	8	4	BRN-WHT	
25		RC STAT/ANT 2 5	9	30	WHT-SLA	
		RC STAT/ANT 1 5	10	5	SLA-WHT	
26		RC STAT/ANT 2 6	11	31	RED-BLU	
		RC STAT/ANT 1 6	12	6	BLU-RED	
27		RC STAT/ANT 2 7	13	32	RED-ORN	
		RC STAT/ANT 1 7	14	7	ORN-RED	
28		RC STAT/ANT 2 8	15	33	RED-GRN	
		RC STAT/ANT 1 8	16	8	GRN-RED	
29		RC STAT/ANT 2 9	17	34	RED-BRN	
		RC STAT/ANT 1 9	18	9	BRN-RED	
30		RC STAT/ANT 2 10	19	35	RED-SLA	
		RC STAT/ANT 1 10	20	10	SLA-RED	
31		RC STAT/ANT 2 11	21	36	BLK-BLU	
		RC STAT/ANT 1 11	22	11	BLU-BLK	
32		RC STAT/ANT 2 12	23	37	BLK-ORN	
		RC STAT/ANT 1 12	24	12	ORN-BLK	
33		RC STAT/ANT 2 13	25	38	BLK-GRN	
		RC STAT/ANT 1 13	26	13	GRN-BLK	
34		RC STAT/ANT 2 14	27	39	BLK-BRN	
		RC STAT/ANT 1 14	28	14	BRN-BLK	
35		RC STAT/ANT 2 15	29	40	BLK-SLA	
		RC STAT/ANT 1 15	30	15	SLA-BLK	
36		RC STAT/ANT 2 16	31	41	YEL-BLU	
		RC STAT/ANT 1 16	32	16	BLU-YEL	
NOT CONNECTED			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 3 (BS-3) M/S TX ANT SWITCH

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		TX STAT/ANT 2 1	1	26	WHT-BLU
		TX STAT/ANT 1 1	2	1	BLU-WHT
22		TX STAT/ANT 2 2	3	27	WHT-ORN
		TX STAT/ANT 1 2	4	2	ORN-WHT
23		TX STAT/ANT 2 3	5	28	WHT-GRN
		TX STAT/ANT 1 3	6	3	GRN-WHT
24		TX STAT/ANT 2 4	7	29	WHT-BRN
		TX STAT/ANT 1 4	8	4	BRN-WHT
25		TX STAT/ANT 2 5	9	30	WHT-SLA
		TX STAT/ANT 1 5	10	5	SLA-WHT
26		TX STAT/ANT 2 6	11	31	RED-BLU
		TX STAT/ANT 1 6	12	6	BLU-RED
27		TX STAT/ANT 2 7	13	32	RED-ORN
		TX STAT/ANT 1 7	14	7	ORN-RED
28		TX STAT/ANT 2 8	15	33	RED-GRN
		TX STAT/ANT 1 8	16	8	GRN-RED
29		TX STAT/ANT 2 9	17	34	RED-BRN
		TX STAT/ANT 1 9	18	9	BRN-RED
30		TX STAT/ANT 2 10	19	35	RED-SLA
		TX STAT/ANT 1 10	20	10	SLA-RED
31		TX STAT/ANT 2 11	21	36	BLK-BLU
		TX STAT/ANT 1 11	22	11	BLU-BLK
32		TX STAT/ANT 2 12	23	37	BLK-ORN
		TX STAT/ANT 1 12	24	12	ORN-BLK
33		TX STAT/ANT 2 13	25	38	BLK-GRN
		TX STAT/ANT 1 13	26	13	GRN-BLK
34		TX STAT/ANT 2 14	27	39	BLK-BRN
		TX STAT/ANT 1 14	28	14	BRN-BLK
35		TX STAT/ANT 2 15	29	40	BLK-SLA
		TX STAT/ANT 1 15	30	15	SLA-BLK
36		TX STAT/ANT 2 16	31	41	YEL-BLU
		TX STAT/ANT 1 16	32	16	BLU-YEL
NOT CONNECTED			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 3 (BS-3) SQLUELCH BREAK MAIN

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		SQ 1	1	26	WHT-BLU
		SQ RT 1	2	1	BLU-WHT
22		SQ 2	3	27	WHT-ORN
		SQ RT 2	4	2	ORN-WHT
23		SQ 3	5	28	WHT-GRN
		SQ RT 3	6	3	GRN-WHT
24		SQ 4	7	29	WHT-BRN
		SQ RT 4	8	4	BRN-WHT
25		SQ 5	9	30	WHT-SLA
		SQ RT 5	10	5	SLA-WHT
26		SQ 6	11	31	RED-BLU
		SQ RT 6	12	6	BLU-RED
27		SQ 7	13	32	RED-ORN
		SQ RT 7	14	7	ORN-RED
28		SQ 8	15	33	RED-GRN
		SQ RT 8	16	8	GRN-RED
29		SQ 9	17	34	RED-BRN
		SQ RT 9	18	9	BRN-RED
30		SQ 10	19	35	RED-SLA
		SQ RT 10	20	10	SLA-RED
31		SQ 11	21	36	BLK-BLU
		SQ RT 11	22	11	BLU-BLK
32		SQ 12	23	37	BLK-ORN
		SQ RT 12	24	12	ORN-BLK
33		SQ 13	25	38	BLK-GRN
		SQ RT 13	26	13	GRN-BLK
34		SQ 14	27	39	BLK-BRN
		SQ RT 14	28	14	BRN-BLK
35		SQ 15	29	40	BLK-SLA
		SQ RT 15	30	15	SLA-BLK
36		SQ 16	31	41	YEL-BLU
		SQ RT 16	32	16	BLU-YEL
NOT CONNECTED		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 3 (BS-3) SQLUELCH BREAK STANDBY

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		SQ 1	1	26	WHT-BLU
		SQ RT 1	2	1	BLU-WHT
22		SQ 2	3	27	WHT-ORN
		SQ RT 2	4	2	ORN-WHT
23		SQ 3	5	28	WHT-GRN
		SQ RT 3	6	3	GRN-WHT
24		SQ 4	7	29	WHT-BRN
		SQ RT 4	8	4	BRN-WHT
25		SQ 5	9	30	WHT-SLA
		SQ RT 5	10	5	SLA-WHT
26		SQ 6	11	31	RED-BLU
		SQ RT 6	12	6	BLU-RED
27		SQ 7	13	32	RED-ORN
		SQ RT 7	14	7	ORN-RED
28		SQ 8	15	33	RED-GRN
		SQ RT 8	16	8	GRN-RED
29		SQ 9	17	34	RED-BRN
		SQ RT 9	18	9	BRN-RED
30		SQ 10	19	35	RED-SLA
		SQ RT 10	20	10	SLA-RED
31		SQ 11	21	36	BLK-BLU
		SQ RT 11	22	11	BLU-BLK
32		SQ 12	23	37	BLK-ORN
		SQ RT 12	24	12	ORN-BLK
33		SQ 13	25	38	BLK-GRN
		SQ RT 13	26	13	GRN-BLK
34		SQ 14	27	39	BLK-BRN
		SQ RT 14	28	14	BRN-BLK
35		SQ 15	29	40	BLK-SLA
		SQ RT 15	30	15	SLA-BLK
36		SQ 16	31	41	YEL-BLU
		SQ RT 16	32	16	BLU-YEL
NOT CONNECTED		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) MAIN RECEIVE AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
37		RX 2 1	1	26	WHT-BLU	
		RX 1 1	2	1	BLU-WHT	
38		RX 2 2	3	27	WHT-ORN	
		RX 1 2	4	2	ORN-WHT	
39		RX 2 3	5	28	WHT-GRN	
		RX 1 3	6	3	GRN-WHT	
40		RX 2 4	7	29	WHT-BRN	
		RX 1 4	8	4	BRN-WHT	
41		RX 2 5	9	30	WHT-SLA	
		RX 1 5	10	5	SLA-WHT	
42		RX 2 6	11	31	RED-BLU	
		RX 1 6	12	6	BLU-RED	
43		RX 2 7	13	32	RED-ORN	
		RX 1 7	14	7	ORN-RED	
44		RX 2 8	15	33	RED-GRN	
		RX 1 8	16	8	GRN-RED	
45		RX 2 9	17	34	RED-BRN	
		RX 1 9	18	9	BRN-RED	
46		RX 2 10	19	35	RED-SLA	
		RX 1 10	20	10	SLA-RED	
47		RX 2 11	21	36	BLK-BLU	
		RX 1 11	22	11	BLU-BLK	
48		RX 2 12	23	37	BLK-ORN	
		RX 1 12	24	12	ORN-BLK	
49		RX 2 13	25	38	BLK-GRN	
		RX 1 13	26	13	GRN-BLK	
50		RX 2 14	27	39	BLK-BRN	
		RX 1 14	28	14	BRN-BLK	
NOT CONNECTED			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) STANDBY RECEIVE AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
37		RX 2 1	1	26	WHT-BLU	
		RX 1 1	2	1	BLU-WHT	
38		RX 2 2	3	27	WHT-ORN	
		RX 1 2	4	2	ORN-WHT	
39		RX 2 3	5	28	WHT-GRN	
		RX 1 3	6	3	GRN-WHT	
40		RX 2 4	7	29	WHT-BRN	
		RX 1 4	8	4	BRN-WHT	
41		RX 2 5	9	30	WHT-SLA	
		RX 1 5	10	5	SLA-WHT	
42		RX 2 6	11	31	RED-BLU	
		RX 1 6	12	6	BLU-RED	
43		RX 2 7	13	32	RED-ORN	
		RX 1 7	14	7	ORN-RED	
44		RX 2 8	15	33	RED-GRN	
		RX 1 8	16	8	GRN-RED	
45		RX 2 9	17	34	RED-BRN	
		RX 1 9	18	9	BRN-RED	
46		RX 2 10	19	35	RED-SLA	
		RX 1 10	20	10	SLA-RED	
47		RX 2 11	21	36	BLK-BLU	
		RX 1 11	22	11	BLU-BLK	
48		RX 2 12	23	37	BLK-ORN	
		RX 1 12	24	12	ORN-BLK	
49		RX 2 13	25	38	BLK-GRN	
		RX 1 13	26	13	GRN-BLK	
50		RX 2 14	27	39	BLK-BRN	
		RX 1 14	28	14	BRN-BLK	
NOT CONNECTED			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) MAIN TRANSMIT AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
37		TX 2 1	1	26	WHT-BLU
		TX 1 1	2	1	BLU-WHT
38		TX 2 2	3	27	WHT-ORN
		TX 1 2	4	2	ORN-WHT
39		TX 2 3	5	28	WHT-GRN
		TX 1 3	6	3	GRN-WHT
40		TX 2 4	7	29	WHT-BRN
		TX 1 4	8	4	BRN-WHT
41		TX 2 5	9	30	WHT-SLA
		TX 1 5	10	5	SLA-WHT
42		TX 2 6	11	31	RED-BLU
		TX 1 6	12	6	BLU-RED
43		TX 2 7	13	32	RED-ORN
		TX 1 7	14	7	ORN-RED
44		TX 2 8	15	33	RED-GRN
		TX 1 8	16	8	GRN-RED
45		TX 2 9	17	34	RED-BRN
		TX 1 9	18	9	BRN-RED
46		TX 2 10	19	35	RED-SLA
		TX 1 10	20	10	SLA-RED
47		TX 2 11	21	36	BLK-BLU
		TX 1 11	22	11	BLU-BLK
48		TX 2 12	23	37	BLK-ORN
		TX 1 12	24	12	ORN-BLK
49		TX 2 13	25	38	BLK-GRN
		TX 1 13	26	13	GRN-BLK
50		TX 2 14	27	39	BLK-BRN
		TX 1 14	28	14	BRN-BLK
NOT CONNECTED		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) STANDBY TRANSMIT AUDIO

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
37		TX 2 1	1	26	WHT-BLU
		TX 1 1	2	1	BLU-WHT
38		TX 2 2	3	27	WHT-ORN
		TX 1 2	4	2	ORN-WHT
39		TX 2 3	5	28	WHT-GRN
		TX 1 3	6	3	GRN-WHT
40		TX 2 4	7	29	WHT-BRN
		TX 1 4	8	4	BRN-WHT
41		TX 2 5	9	30	WHT-SLA
		TX 1 5	10	5	SLA-WHT
42		TX 2 6	11	31	RED-BLU
		TX 1 6	12	6	BLU-RED
43		TX 2 7	13	32	RED-ORN
		TX 1 7	14	7	ORN-RED
44		TX 2 8	15	33	RED-GRN
		TX 1 8	16	8	GRN-RED
45		TX 2 9	17	34	RED-BRN
		TX 1 9	18	9	BRN-RED
46		TX 2 10	19	35	RED-SLA
		TX 1 10	20	10	SLA-RED
47		TX 2 11	21	36	BLK-BLU
		TX 1 11	22	11	BLU-BLK
48		TX 2 12	23	37	BLK-ORN
		TX 1 12	24	12	ORN-BLK
49		TX 2 13	25	38	BLK-GRN
		TX 1 13	26	13	GRN-BLK
50		TX 2 14	27	39	BLK-BRN
		TX 1 14	28	14	BRN-BLK
NOT CONNECTED		29	40	BLK-SLA	
		30	15	SLA-BLK	
		31	41	YEL-BLU	
		32	16	BLU-YEL	
		33	42	YEL-ORN	
		34	17	ORN-YEL	
		35	43	YEL-GRN	
		36	18	GRN-YEL	
		37	44	YEL-BNR	
		38	19	BRN-YEL	
		39	45	YEL-SLA	
		40	20	SLA-YEL	
		41	46	VIO-BLU	
		42	21	BLU-VIO	
		43	47	VIO-ORN	
		44	22	ORN-VIO	
		45	48	VIO-GRN	
		46	23	GRN-VIO	
		47	49	VIO-BRN	
		48	24	BRN-VIO	
		49	50	VIO-SLA	
NOT CONNECTED		50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) MAIN PTT

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
37		PTT 2 1	1	26	WHT-BLU	
		PTT 1 1	2	1	BLU-WHT	
38		PTT 2 2	3	27	WHT-ORN	
		PTT 1 2	4	2	ORN-WHT	
39		PTT 2 3	5	28	WHT-GRN	
		PTT 1 3	6	3	GRN-WHT	
40		PTT 2 4	7	29	WHT-BRN	
		PTT 1 4	8	4	BRN-WHT	
41		PTT 2 5	9	30	WHT-SLA	
		PTT 1 5	10	5	SLA-WHT	
42		PTT 2 6	11	31	RED-BLU	
		PTT 1 6	12	6	BLU-RED	
43		PTT 2 7	13	32	RED-ORN	
		PTT 1 7	14	7	ORN-RED	
44		PTT 2 8	15	33	RED-GRN	
		PTT 1 8	16	8	GRN-RED	
45		PTT 2 9	17	34	RED-BRN	
		PTT 1 9	18	9	BRN-RED	
46		PTT 2 10	19	35	RED-SLA	
		PTT 1 10	20	10	SLA-RED	
47		PTT 2 11	21	36	BLK-BLU	
		PTT 1 11	22	11	BLU-BLK	
48		PTT 2 12	23	37	BLK-ORN	
		PTT 1 12	24	12	ORN-BLK	
49		PTT 2 13	25	38	BLK-GRN	
		PTT 1 13	26	13	GRN-BLK	
50		PTT 2 14	27	39	BLK-BRN	
		PTT 1 14	28	14	BRN-BLK	
NOT CONNECTED			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) STANDBY PTT

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
37		PTT 2 1	1	26	WHT-BLU	
		PTT 1 1	2	1	BLU-WHT	
38		PTT 2 2	3	27	WHT-ORN	
		PTT 1 2	4	2	ORN-WHT	
39		PTT 2 3	5	28	WHT-GRN	
		PTT 1 3	6	3	GRN-WHT	
40		PTT 2 4	7	29	WHT-BRN	
		PTT 1 4	8	4	BRN-WHT	
41		PTT 2 5	9	30	WHT-SLA	
		PTT 1 5	10	5	SLA-WHT	
42		PTT 2 6	11	31	RED-BLU	
		PTT 1 6	12	6	BLU-RED	
43		PTT 2 7	13	32	RED-ORN	
		PTT 1 7	14	7	ORN-RED	
44		PTT 2 8	15	33	RED-GRN	
		PTT 1 8	16	8	GRN-RED	
45		PTT 2 9	17	34	RED-BRN	
		PTT 1 9	18	9	BRN-RED	
46		PTT 2 10	19	35	RED-SLA	
		PTT 1 10	20	10	SLA-RED	
47		PTT 2 11	21	36	BLK-BLU	
		PTT 1 11	22	11	BLU-BLK	
48		PTT 2 12	23	37	BLK-ORN	
		PTT 1 12	24	12	ORN-BLK	
49		PTT 2 13	25	38	BLK-GRN	
		PTT 1 13	26	13	GRN-BLK	
50		PTT 2 14	27	39	BLK-BRN	
		PTT 1 14	28	14	BRN-BLK	
NOT CONNECTED			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) M/S RCV ANT SWITCH

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
37		RC STAT/ANT 2 1	1	26	WHT-BLU	
		RC STAT/ANT 11	2	1	BLU-WHT	
38		RC STAT/ANT 22	3	27	WHT-ORN	
		RC STAT/ANT 12	4	2	ORN-WHT	
39		RC STAT/ANT 23	5	28	WHT-GRN	
		RC STAT/ANT 13	6	3	GRN-WHT	
40		RC STAT/ANT 2 4	7	29	WHT-BRN	
		RC STAT/ANT 1 4	8	4	BRN-WHT	
41		RC STAT/ANT 2 5	9	30	WHT-SLA	
		RC STAT/ANT 1 5	10	5	SLA-WHT	
42		RC STAT/ANT 2 6	11	31	RED-BLU	
		RC STAT/ANT 1 6	12	6	BLU-RED	
43		RC STAT/ANT 2 7	13	32	RED-ORN	
		RC STAT/ANT 1 7	14	7	ORN-RED	
44		RC STAT/ANT 2 8	15	33	RED-GRN	
		RC STAT/ANT 1 8	16	8	GRN-RED	
45		RC STAT/ANT 2 9	17	34	RED-BRN	
		RC STAT/ANT 1 9	18	9	BRN-RED	
46		RC STAT/ANT 2 10	19	35	RED-SLA	
		RC STAT/ANT 1 10	20	10	SLA-RED	
47		RC STAT/ANT 2 11	21	36	BLK-BLU	
		RC STAT/ANT 1 11	22	11	BLU-BLK	
48		RC STAT/ANT 2 12	23	37	BLK-ORN	
		RC STAT/ANT 1 12	24	12	ORN-BLK	
49		RC STAT/ANT 2 13	25	38	BLK-GRN	
		RC STAT/ANT 1 13	26	13	GRN-BLK	
50		RC STAT/ANT 2 14	27	39	BLK-BRN	
		RC STAT/ANT 1 14	28	14	BRN-BLK	
NOT CONNECTED			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) M/S TX ANT SWITCH

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
37		TX STAT/ANT 2 1	1	26	WHT-BLU	
		TX STAT/ANT 1 1	2	1	BLU-WHT	
38		TX STAT/ANT 2 2	3	27	WHT-ORN	
		TX STAT/ANT 1 2	4	2	ORN-WHT	
39		TX STAT/ANT 2 3	5	28	WHT-GRN	
		TX STAT/ANT 1 3	6	3	GRN-WHT	
40		TX STAT/ANT 2 4	7	29	WHT-BRN	
		TX STAT/ANT 1 4	8	4	BRN-WHT	
41		TX STAT/ANT 2 5	9	30	WHT-SLA	
		TX STAT/ANT 1 5	10	5	SLA-WHT	
42		TX STAT/ANT 2 6	11	31	RED-BLU	
		TX STAT/ANT 1 6	12	6	BLU-RED	
43		TX STAT/ANT 2 7	13	32	RED-ORN	
		TX STAT/ANT 1 7	14	7	ORN-RED	
44		TX STAT/ANT 2 8	15	33	RED-GRN	
		TX STAT/ANT 1 8	16	8	GRN-RED	
45		TX STAT/ANT 2 9	17	34	RED-BRN	
		TX STAT/ANT 1 9	18	9	BRN-RED	
46		TX STAT/ANT 2 10	19	35	RED-SLA	
		TX STAT/ANT 1 10	20	10	SLA-RED	
47		TX STAT/ANT 2 11	21	36	BLK-BLU	
		TX STAT/ANT 1 11	22	11	BLU-BLK	
48		TX STAT/ANT 2 12	23	37	BLK-ORN	
		TX STAT/ANT 1 12	24	12	ORN-BLK	
49		TX STAT/ANT 2 13	25	38	BLK-GRN	
		TX STAT/ANT 1 13	26	13	GRN-BLK	
50		TX STAT/ANT 2 14	27	39	BLK-BRN	
		TX STAT/ANT 1 14	28	14	BRN-BLK	
NOT CONNECTED			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) SQLUELCH BREAK MAIN

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
37		SQ 1	1	26	WHT-BLU	
		SQ RT 1	2	1	BLU-WHT	
38		SQ 2	3	27	WHT-ORN	
		SQ RT 2	4	2	ORN-WHT	
39		SQ 3	5	28	WHT-GRN	
		SQ RT 3	6	3	GRN-WHT	
40		SQ 4	7	29	WHT-BRN	
		SQ RT 4	8	4	BRN-WHT	
41		SQ 5	9	30	WHT-SLA	
		SQ RT 5	10	5	SLA-WHT	
42		SQ 6	11	31	RED-BLU	
		SQ RT 6	12	6	BLU-RED	
43		SQ 7	13	32	RED-ORN	
		SQ RT 7	14	7	ORN-RED	
44		SQ 8	15	33	RED-GRN	
		SQ RT 8	16	8	GRN-RED	
45		SQ 9	17	34	RED-BRN	
		SQ RT 9	18	9	BRN-RED	
46		SQ 10	19	35	RED-SLA	
		SQ RT 10	20	10	SLA-RED	
47		SQ 11	21	36	BLK-BLU	
		SQ RT 11	22	11	BLU-BLK	
48		SQ 12	23	37	BLK-ORN	
		SQ RT 12	24	12	ORN-BLK	
49		SQ 13	25	38	BLK-GRN	
		SQ RT 13	26	13	GRN-BLK	
50		SQ 14	27	39	BLK-BRN	
		SQ RT 14	28	14	BRN-BLK	
NOT CONNECTED			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 4 (BS-3) SQLUELCH BREAK STANDBY

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
37		SQ 1	1	26	WHT-BLU	
		SQ RT 1	2	1	BLU-WHT	
38		SQ 2	3	27	WHT-ORN	
		SQ RT 2	4	2	ORN-WHT	
39		SQ 3	5	28	WHT-GRN	
		SQ RT 3	6	3	GRN-WHT	
40		SQ 4	7	29	WHT-BRN	
		SQ RT 4	8	4	BRN-WHT	
41		SQ 5	9	30	WHT-SLA	
		SQ RT 5	10	5	SLA-WHT	
42		SQ 6	11	31	RED-BLU	
		SQ RT 6	12	6	BLU-RED	
43		SQ 7	13	32	RED-ORN	
		SQ RT 7	14	7	ORN-RED	
44		SQ 8	15	33	RED-GRN	
		SQ RT 8	16	8	GRN-RED	
45		SQ 9	17	34	RED-BRN	
		SQ RT 9	18	9	BRN-RED	
46		SQ 10	19	35	RED-SLA	
		SQ RT 10	20	10	SLA-RED	
47		SQ 11	21	36	BLK-BLU	
		SQ RT 11	22	11	BLU-BLK	
48		SQ 12	23	37	BLK-ORN	
		SQ RT 12	24	12	ORN-BLK	
49		SQ 13	25	38	BLK-GRN	
		SQ RT 13	26	13	GRN-BLK	
50		SQ 14	27	39	BLK-BRN	
		SQ RT 14	28	14	BRN-BLK	
NOT CONNECTED			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

A/G CABLE GROUP 1 (BS-1, 2, AND 3) RADIO RECORDERS

		FUNCTION	CLIP	PIN	COLOR
1		RCRDR 2 1	1	26	WHT-BLU
		RCRDR 1 1	2	1	BLU-WHT
2		RCRDR 2 2	3	27	WHT-ORN
		RCRDR 1 2	4	2	ORN-WHT
3		RCRDR 2 3	5	28	WHT-GRN
		RCRDR 1 3	6	3	GRN-WHT
4		RCRDR 2 4	7	29	WHT-BRN
		RCRDR 1 4	8	4	BRN-WHT
5		RCRDR 2 5	9	30	WHT-SLA
		RCRDR 1 5	10	5	SLA-WHT
6		RCRDR 2 6	11	31	RED-BLU
		RCRDR 1 6	12	6	BLU-RED
7		RCRDR 2 7	13	32	RED-ORN
		RCRDR 1 7	14	7	ORN-RED
8		RCRDR 2 8	15	33	RED-GRN
		RCRDR 1 8	16	8	GRN-RED
9		RCRDR 2 9	17	34	RED-BRN
		RCRDR 1 9	18	9	BRN-RED
10		RCRDR 2 10	19	35	RED-SLA
		RCRDR 1 10	20	10	SLA-RED
11		RCRDR 2 11	21	36	BLK-BLU
		RCRDR 1 11	22	11	BLU-BLK
12		RCRDR 2 12	23	37	BLK-ORN
		RCRDR 1 12	24	12	ORN-BLK
	NOT CONNECTED		25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
	NOT CONNECTED		50	25	SLA-VIO

A/G CABLE GROUP 2 (BS- 2 AND 3) RADIO RECORDERS

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
13		RCRDR 2 1	1	26	WHT-BLU
		RCRDR 1 1	2	1	BLU-WHT
14		RCRDR 2 2	3	27	WHT-ORN
		RCRDR 1 2	4	2	ORN-WHT
15		RCRDR 2 3	5	28	WHT-GRN
		RCRDR 1 3	6	3	GRN-WHT
16		RCRDR 2 4	7	29	WHT-BRN
		RCRDR 1 4	8	4	BRN-WHT
17		RCRDR 2 5	9	30	WHT-SLA
		RCRDR 1 5	10	5	SLA-WHT
18		RCRDR 2 6	11	31	RED-BLU
		RCRDR 1 6	12	6	BLU-RED
19		RCRDR 2 7	13	32	RED-ORN
		RCRDR 1 7	14	7	ORN-RED
20		RCRDR 2 8	15	33	RED-GRN
		RCRDR 1 8	16	8	GRN-RED
NOT CONNECTED			17	34	RED-BRN
			18	9	BRN-RED
			19	35	RED-SLA
			20	10	SLA-RED
			21	36	BLK-BLU
			22	11	BLU-BLK
			23	37	BLK-ORN
			24	12	ORN-BLK
			25	38	BLK-GRN
			26	13	GRN-BLK
			27	39	BLK-BRN
			28	14	BRN-BLK
			29	40	BLK-SLA
			30	15	SLA-BLK
			31	41	YEL-BLU
			32	16	BLU-YEL
			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 3 (BS-3) RADIO RECORDERS

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR
21		RCRDR 2 1	1	26	WHT-BLU
		RCRDR 1 1	2	1	BLU-WHT
22		RCRDR 2 2	3	27	WHT-ORN
		RCRDR 1 2	4	2	ORN-WHT
23		RCRDR 2 3	5	28	WHT-GRN
		RCRDR 1 3	6	3	GRN-WHT
24		RCRDR 2 4	7	29	WHT-BRN
		RCRDR 1 4	8	4	BRN-WHT
25		RCRDR 2 5	9	30	WHT-SLA
		RCRDR 1 5	10	5	SLA-WHT
26		RCRDR 2 6	11	31	RED-BLU
		RCRDR 1 6	12	6	BLU-RED
27		RCRDR 2 7	13	32	RED-ORN
		RCRDR 1 7	14	7	ORN-RED
28		RCRDR 2 8	15	33	RED-GRN
		RCRDR 1 8	16	8	GRN-RED
29		RCRDR 2 9	17	34	RED-BRN
		RCRDR 1 9	18	9	BRN-RED
30		RCRDR 2 10	19	35	RED-SLA
		RCRDR 1 10	20	10	SLA-RED
31		RCRDR 2 11	21	36	BLK-BLU
		RCRDR 1 11	22	11	BLU-BLK
32		RCRDR 2 12	23	37	BLK-ORN
		RCRDR 1 12	24	12	ORN-BLK
33		RCRDR 2 13	25	38	BLK-GRN
		RCRDR 1 13	26	13	GRN-BLK
34		RCRDR 2 14	27	39	BLK-BRN
		RCRDR 1 14	28	14	BRN-BLK
35		RCRDR 2 15	29	40	BLK-SLA
		RCRDR 1 15	30	15	SLA-BLK
36		RCRDR 2 16	31	41	YEL-BLU
		RCRDR 1 16	32	16	BLU-YEL
NOT CONNECTED			33	42	YEL-ORN
			34	17	ORN-YEL
			35	43	YEL-GRN
			36	18	GRN-YEL
			37	44	YEL-BNR
			38	19	BRN-YEL
			39	45	YEL-SLA
			40	20	SLA-YEL
			41	46	VIO-BLU
			42	21	BLU-VIO
			43	47	VIO-ORN
			44	22	ORN-VIO
			45	48	VIO-GRN
			46	23	GRN-VIO
			47	49	VIO-BRN
			48	24	BRN-VIO
			49	50	VIO-SLA
NOT CONNECTED			50	25	SLA-VIO

A/G CABLE GROUP 4 (BS-3) RADIO RECORDERS

PAIR	RADIO FREQUENCY	FUNCTION	CLIP	PIN	COLOR	
37		RCRDR 2 1	1	26	WHT-BLU	
		RCRDR 1 1	2	1	BLU-WHT	
38		RCRDR 2 2	3	27	WHT-ORN	
		RCRDR 1 2	4	2	ORN-WHT	
39		RCRDR 2 3	5	28	WHT-GRN	
		RCRDR 1 3	6	3	GRN-WHT	
40		RCRDR 2 4	7	29	WHT-BRN	
		RCRDR 1 4	8	4	BRN-WHT	
41		RCRDR 2 5	9	30	WHT-SLA	
		RCRDR 1 5	10	5	SLA-WHT	
42		RCRDR 2 6	11	31	RED-BLU	
		RCRDR 1 6	12	6	BLU-RED	
43		RCRDR 2 7	13	32	RED-ORN	
		RCRDR 1 7	14	7	ORN-RED	
44		RCRDR 2 8	15	33	RED-GRN	
		RCRDR 1 8	16	8	GRN-RED	
45		RCRDR 2 9	17	34	RED-BRN	
		RCRDR 1 9	18	9	BRN-RED	
46		RCRDR 2 10	19	35	RED-SLA	
		RCRDR 1 10	20	10	SLA-RED	
47		RCRDR 2 11	21	36	BLK-BLU	
		RCRDR 1 11	22	11	BLU-BLK	
48		RCRDR 2 12	23	37	BLK-ORN	
		RCRDR 1 12	24	12	ORN-BLK	
49		RCRDR 2 13	25	38	BLK-GRN	
		RCRDR 1 13	26	13	GRN-BLK	
50		RCRDR 2 14	27	39	BLK-BRN	
		RCRDR 1 14	28	14	BRN-BLK	
NOT CONNECTED			29	40	BLK-SLA	
			30	15	SLA-BLK	
			31	41	YEL-BLU	
			32	16	BLU-YEL	
			33	42	YEL-ORN	
			34	17	ORN-YEL	
			35	43	YEL-GRN	
			36	18	GRN-YEL	
			37	44	YEL-BNR	
			38	19	BRN-YEL	
			39	45	YEL-SLA	
			40	20	SLA-YEL	
			41	46	VIO-BLU	
			42	21	BLU-VIO	
			43	47	VIO-ORN	
			44	22	ORN-VIO	
			45	48	VIO-GRN	
			46	23	GRN-VIO	
			47	49	VIO-BRN	
			48	24	BRN-VIO	
			49	50	VIO-SLA	
NOT CONNECTED			50	25	SLA-VIO	

DISTRIBUTION PANEL 1 (BS-1, 2, AND 3) OPERATOR RECORDERS

Pair	Position	FUNCTION	CLIP	PIN	COLOR
1	Maintenance	RCRDR 2 1	1	26	WHT-BLU
		RCRDR 1 1	2	1	BLU-WHT
2	1	RCRDR 2 2	3	27	WHT-ORN
		RCRDR 1 2	4	2	ORN-WHT
3	2	RCRDR 2 3	5	28	WHT-GRN
		RCRDR 1 3	6	3	GRN-WHT
4	3	RCRDR 2 4	7	29	WHT-BRN
		RCRDR 1 4	8	4	BRN-WHT
5	4	RCRDR 2 5	9	30	WHT-SLA
		RCRDR 1 5	10	5	SLA-WHT
6	5	RCRDR 2 6	11	31	RED-BLU
		RCRDR 1 6	12	6	BLU-RED
7	6	RCRDR 2 7	13	32	RED-ORN
		RCRDR 1 7	14	7	ORN-RED
8	7	RCRDR 2 8	15	33	RED-GRN
		RCRDR 1 8	16	8	GRN-RED
9	8	RCRDR 2 9	17	34	RED-BRN
		RCRDR 1 9	18	9	BRN-RED
10	9	RCRDR 2 10	19	35	RED-SLA
		RCRDR 1 10	20	10	SLA-RED
11	NOT CONNECTED		21	36	BLK-BLU
			22	11	BLU-BLK
12			23	37	BLK-ORN
			24	12	ORN-BLK
13			25	38	BLK-GRN
			26	13	GRN-BLK
14			27	39	BLK-BRN
			28	14	BRN-BLK
15			29	40	BLK-SLA
			30	15	SLA-BLK
16			31	41	YEL-BLU
			32	16	BLU-YEL
17			33	42	YEL-ORN
			34	17	ORN-YEL
18			35	43	YEL-GRN
			36	18	GRN-YEL
19			37	44	YEL-BNR
			38	19	BRN-YEL
20			39	45	YEL-SLA
			40	20	SLA-YEL
21			41	46	VIO-BLU
			42	21	BLU-VIO
22			43	47	VIO-ORN
			44	22	ORN-VIO
23			45	48	VIO-GRN
			46	23	GRN-VIO
24			47	49	VIO-BRN
			48	24	BRN-VIO
25			49	50	VIO-SLA
	NOT CONNECTED		50	25	SLA-VIO

DISTRIBUTION PANEL 2 (BS-2 AND 3) OPERATOR RECORDERS

Pair	Position	FUNCTION	CLIP	PIN	COLOR
1	10	RCRDR 2 1	1	26	WHT-BLU
		RCRDR 1 1	2	1	BLU-WHT
2	11	RCRDR 2 2	3	27	WHT-ORN
		RCRDR 1 2	4	2	ORN-WHT
3	12	RCRDR 2 3	5	28	WHT-GRN
		RCRDR 1 3	6	3	GRN-WHT
4	13	RCRDR 2 4	7	29	WHT-BRN
		RCRDR 1 4	8	4	BRN-WHT
5	14	RCRDR 2 5	9	30	WHT-SLA
		RCRDR 1 5	10	5	SLA-WHT
6	15	RCRDR 2 6	11	31	RED-BLU
		RCRDR 1 6	12	6	BLU-RED
7	16	RCRDR 2 7	13	32	RED-ORN
		RCRDR 1 7	14	7	ORN-RED
8	17	RCRDR 2 8	15	33	RED-GRN
		RCRDR 1 8	16	8	GRN-RED
9	18	RCRDR 2 9	17	34	RED-BRN
		RCRDR 1 9	18	9	BRN-RED
10	19	RCRDR 2 10	19	35	RED-SLA
		RCRDR 1 10	20	10	SLA-RED
11	20	RCRDR 2 11	21	36	BLK-BLU
		RCRDR 1 11	22	11	BLU-BLK
12	21	RCRDR 2 12	23	37	BLK-ORN
		RCRDR 1 12	24	12	ORN-BLK
13	22	RCRDR 2 13	25	38	BLK-GRN
		RCRDR 1 13	26	13	GRN-BLK
14	23	RCRDR 2 14	27	39	BLK-BRN
		RCRDR 1 14	28	14	BRN-BLK
15	24	RCRDR 2 15	29	40	BLK-SLA
		RCRDR 1 15	30	15	SLA-BLK
16	NOT CONNECTED		31	41	YEL-BLU
			32	16	BLU-YEL
17			33	42	YEL-ORN
			34	17	ORN-YEL
18			35	43	YEL-GRN
			36	18	GRN-YEL
19			37	44	YEL-BNR
			38	19	BRN-YEL
20			39	45	YEL-SLA
			40	20	SLA-YEL
21			41	46	VIO-BLU
			42	21	BLU-VIO
22			43	47	VIO-ORN
			44	22	ORN-VIO
23			45	48	VIO-GRN
			46	23	GRN-VIO
24			47	49	VIO-BRN
			48	24	BRN-VIO
25	NOT CONNECTED		49	50	VIO-SLA
			50	25	SLA-VIO

DISTRIBUTION PANEL 3 (BS-3) OPERATOR RECORDERS

Pair	Position	FUNCTION	CLIP	PIN	COLOR
1	25	RCRDR 2 1	1	26	WHT-BLU
		RCRDR 1 1	2	1	BLU-WHT
2	26	RCRDR 2 2	3	27	WHT-ORN
		RCRDR 1 2	4	2	ORN-WHT
3	27	RCRDR 2 3	5	28	WHT-GRN
		RCRDR 1 3	6	3	GRN-WHT
4	28	RCRDR 2 4	7	29	WHT-BRN
		RCRDR 1 4	8	4	BRN-WHT
5	29	RCRDR 2 5	9	30	WHT-SLA
		RCRDR 1 5	10	5	SLA-WHT
6	30	RCRDR 2 6	11	31	RED-BLU
		RCRDR 1 6	12	6	BLU-RED
7	31	RCRDR 2 7	13	32	RED-ORN
		RCRDR 1 7	14	7	ORN-RED
8	32	RCRDR 2 8	15	33	RED-GRN
		RCRDR 1 8	16	8	GRN-RED
9	33	RCRDR 2 9	17	34	RED-BRN
		RCRDR 1 9	18	9	BRN-RED
10	34	RCRDR 2 10	19	35	RED-SLA
		RCRDR 1 10	20	10	SLA-RED
11	35	RCRDR 2 11	21	36	BLK-BLU
		RCRDR 1 11	22	11	BLU-BLK
12	36	RCRDR 2 12	23	37	BLK-ORN
		RCRDR 1 12	24	12	ORN-BLK
13	37	RCRDR 2 13	25	38	BLK-GRN
		RCRDR 1 13	26	13	GRN-BLK
14	38	RCRDR 2 14	27	39	BLK-BRN
		RCRDR 1 14	28	14	BRN-BLK
15	39	RCRDR 2 15	29	40	BLK-SLA
		RCRDR 1 15	30	15	SLA-BLK
16	40	RCRDR 2 16	31	41	YEL-BLU
		RCRDR 1 16	32	16	BLU-YEL
17	NOT CONNECTED		33	42	YEL-ORN
			34	17	ORN-YEL
18			35	43	YEL-GRN
			36	18	GRN-YEL
19			37	44	YEL-BNR
			38	19	BRN-YEL
20			39	45	YEL-SLA
			40	20	SLA-YEL
21			41	46	VIO-BLU
			42	21	BLU-VIO
22			43	47	VIO-ORN
			44	22	ORN-VIO
23			45	48	VIO-GRN
			46	23	GRN-VIO
24			47	49	VIO-BRN
			48	24	BRN-VIO
25	NOT CONNECTED		49	50	VIO-SLA
			50	25	SLA-VIO

REMOTE INTERLOCKED RADIO CABLE 1 OF 1

PAIR	Remote Radio Circuit Number	Function	CLIP	PIN	COLOR
1	1	TIP	1	26	WHT-BLU
		RING	2	1	BLU-WHT
2		TIP 1	3	27	WHT-ORN
		RING 1	4	2	ORN-WHT
3		E	5	28	WHT-GRN
		M	6	3	GRN-WHT
4		SB	7	29	WHT-BRN
		SG	8	4	BRN-WHT
5	2	TIP	9	30	WHT-SLA
		RING	10	5	SLA-WHT
6		TIP 1	11	31	RED-BLU
		RING 1	12	6	BLU-RED
7		E	13	32	RED-ORN
		M	14	7	ORN-RED
8		SB	15	33	RED-GRN
		SG	16	8	GRN-RED
9	3	TIP	17	34	RED-BRN
		RING	18	9	BRN-RED
10		TIP 1	19	35	RED-SLA
		RING 1	20	10	SLA-RED
11		E	21	36	BLK-BLU
		M	22	11	BLU-BLK
12		SB	23	37	BLK-ORN
		SG	24	12	ORN-BLK
13	4	TIP	25	38	BLK-GRN
		RING	26	13	GRN-BLK
14		TIP 1	27	39	BLK-BRN
		RING 1	28	14	BRN-BLK
15		E	29	40	BLK-SLA
		M	30	15	SLA-BLK
16		SB	49	50	VIO-SLA
		SG	50	25	SLA-VIO
17	NOT CONNECTED		33	42	YEL-ORN
			34	17	ORN-YEL
18			35	43	YEL-GRN
			36	18	GRN-YEL
19			37	44	YEL-BNR
			38	19	BRN-YEL
20			39	45	YEL-SLA
			40	20	SLA-YEL
21			41	46	VIO-BLU
			42	21	BLU-VIO
22			43	47	VIO-ORN
			44	22	ORN-VIO
23			45	48	VIO-GRN
			46	23	GRN-VIO
24			47	49	VIO-BRN
			48	24	BRN-VIO
25	NOT CONNECTED		49	50	VIO-SLA
			50	25	SLA-VIO

REMOTE INTERLOCKING RADIO CABLE 1 OF 1

PAIR	Remote Radio Circuit Number	Function	CLIP	PIN	COLOR
1	1	TIP	1	26	WHT-BLU
		RING	2	1	BLU-WHT
2		TIP 1	3	27	WHT-ORN
		RING 1	4	2	ORN-WHT
3		E	5	28	WHT-GRN
		M	6	3	GRN-WHT
4		SB	7	29	WHT-BRN
		SG	8	4	BRN-WHT
5	2	TIP	9	30	WHT-SLA
		RING	10	5	SLA-WHT
6		TIP 1	11	31	RED-BLU
		RING 1	12	6	BLU-RED
7		E	13	32	RED-ORN
		M	14	7	ORN-RED
8		SB	15	33	RED-GRN
		SG	16	8	GRN-RED
9	3	TIP	17	34	RED-BRN
		RING	18	9	BRN-RED
10		TIP 1	19	35	RED-SLA
		RING 1	20	10	SLA-RED
11		E	21	36	BLK-BLU
		M	22	11	BLU-BLK
12		SB	23	37	BLK-ORN
		SG	24	12	ORN-BLK
13	4	TIP	25	38	BLK-GRN
		RING	26	13	GRN-BLK
14		TIP 1	27	39	BLK-BRN
		RING 1	28	14	BRN-BLK
15		E	29	40	BLK-SLA
		M	30	15	SLA-BLK
16		SB	49	50	VIO-SLA
		SG	50	25	SLA-VIO
17	NOT CONNECTED		33	42	YEL-ORN
			34	17	ORN-YEL
18			35	43	YEL-GRN
			36	18	GRN-YEL
19			37	44	YEL-BNR
			38	19	BRN-YEL
20			39	45	YEL-SLA
			40	20	SLA-YEL
21			41	46	VIO-BLU
			42	21	BLU-VIO
22			43	47	VIO-ORN
			44	22	ORN-VIO
23			45	48	VIO-GRN
			46	23	GRN-VIO
24			47	49	VIO-BRN
			48	24	BRN-VIO
25	NOT CONNECTED		49	50	VIO-SLA
			50	25	SLA-VIO